

MICHIGAN FARMER

VOLUME XVI.

DETROIT, AUGUST, 1858.

NUMBER 8.

R. F. JOHNSTONE, Editor.

THE MICHIGAN FARMER.

Published monthly by ROBERT F. JOHNSTONE, Detroit, Mich.
Office on Jefferson Avenue, No. 130 Agricultural Rooms,
Next door to Peninsular Bank.

Terms.

For any number of copies not exceeding four.....\$1 00 each
For a club of any number from five to ten.....80 cts "
For clubs of any number not less than ten.....75 cts "

All letters to be addressed to ROBERT F. JOHNSTONE, Detroit Mich., (post paid.)

Advertisements.

All advertisements for the Farmer must be sent forward so as to reach us by the 20th of each month.

Rates of Advertising.

For a square of ten lines, single insertion.....\$1 25
For each subsequent insertion.....1 00
For advertisements making over one square, and for periods of over three months, our terms will be liberal.

The attention of Breeders of Stock, Nursery men, Florists, Seedsmen and Agricultural Implement Manufacturers, as well as those who wish either to buy or dispose of farms or farming lands, stocks, &c., is particularly called to the advantages which a circulation of nearly twelve thousand offers to them throughout the State of Michigan.

CONTENTS.

Agricultural.

Wool and Wool Growing.....	221
What is the Thoroughbred horse.....	223
Pedigree of Imported Messenger.....	224
Influence of Water in food for Young Stock.....	225
The Weevil, Mediterranean Wheat, and Influence of Draining.....	226
A few facts about Draining.....	227
Formation and Characteristics of the Horse (concluded).....	229
Planning for draining.....	230
Leveling Instruments.....	232
A Short Time among the Shorthorns.....	232
An Improvement in Clover Seed Gatherers.....	233
Successful Orchard Planting.....	233
The Patent Office and its Agricultural Department.....	233
Our Note Book—On the Southern Michigan R. R.....	234
Piazas, their necessity.....	235
Circular of American Pomological Society.....	235
Sustaining our own papers.....	236

Horticultural.

Origin of the American Pomological Society—its Influence upon Fruit Culture.....	237
Standards vs. Root-grafts.....	238
Pear Culture, Soils for Pears.....	238
Report of Secretary of State Horticultural Society.....	240
Horticultural notes.....	241

Household.

Poetry—Alice—The Farmers Boy.....	242
In the country.....	242
Domestic Economy.....	243
The Magnolia.....	243
Washing Recipe—Rice Puddings, Enigmas and Answers.....	243

Editorial.

State Fair for 1858.....	245
County Fair for 1858.....	245
Proceedings of the Executive Committee of State Agricultural Society.....	245
Markets and Crops.....	245
Notes and Queries.....	245

Wool and Wool Growing Interests.

The recent publication of statistical tables by the British Government, enables us to glean a few interesting facts about wool, which it will do no harm to our woolgrowers to be acquainted with.

It appears that Great Britain in 1843, only imported 49½ millions of pounds of wool, whilst in 1857 she imported 129½ millions of pounds, being nearly in the proportion of three for one. It is somewhat curious to note also the changes which have taken place in the quantities imported from the several countries previously depended on for a supply. For instance, Spain which in 1843 furnished almost 600,000 pounds, in 1857 supplied but little over one half that amount; Germany that sent into England nearly 17 millions of pounds, in 1857 sent only a little over 6 millions; but other European countries, which in 1843 only exported into England 6 millions, had increased their aggregate amount to 24 millions of pounds. South America had likewise, during the same time increased her export of wool into Great Britain in the same period, from four to nine millions. But the most remarkable change is that which has gone on in the British colonial possessions, and in their case we give the exact figures, so that Michigan farmers need not be alarmed that they alone will deluge the markets of the world, if they raise one or two millions of pounds of wool more than they have done the past year; it will all be needed to supply the wants of a rapidly increasing population.

The British colonial possessions are divided into three sections; and each has increased its production of wool in an amazing degree, but, so far as we can learn, without creating a surplus, or causing a depreciation of prices. The importation of wool from the colonies into Great Britain in 1843 and 1857 was as follows:

	1843.	1857.
British settlements in South Africa.....	1,728,453	14,287,824
do do East Indies.....	1,916,128	19,370,741
do do Australia.....	17,453,780	49,200,685

It will not be out of place to remark here that within the period mentioned nearly all the woolen

manufactories in the United States have broken down or given up work.

The annual production of wool in England is estimated at 120 millions of pounds, and as she uses nearly all her own wool, with the exception of about 20 millions that are exported raw, there is consumed in the aggregate 240 millions of pounds, of which it is estimated her own 26 millions of inhabitants use 180 millions of pounds, leaving only about 50 millions to be exported in the shape of manufactured goods.

The whole amount of raw wool imported into the United States last year was but 16½ millions of pounds; of which only half a million came from Great Britain or any of her possessions. But of manufactured wools we imported at the average value of \$3.33 per head for every one of the population of the United States, estimating that population at 27½ millions of people. Allowing the manufactured wools to be worth an average of \$1 per pound, as the imported raw wool is averaged by the report of the Treasury department at 13 cents per pound, and we have an average of 3¼ lbs of foreign wool used by every inhabitant of the United States during the year, besides the amount of their own produce, and imported raw material, making an average consumption for each of our present estimated population of a little less than six pounds per head. The consumption in Great Britain is estimated at 6 9-10ths lbs. per head, for the whole population.

Nor has the average price of foreign wool decreased—in fact it has increased; and hence one of the causes why our manufacturers have been crowded out of the market, and also why they have sought to counteract this rise by an alteration of the tariff, and by a depreciation of the prices of our home grown wool. For instance, in 1849 imported wool averaged but 6½ cents per pound, and the duty was then only 2.02 cents per pound; in 1857 it had risen to 13 cents per pound, and the duty had increased to 3.60 cents. Other countries had found it advisable to admit wool free, but they took good care at the same time to give their own manufacturers such advantages, that they had command of their own markets, and could also enter into all the markets of the world, and compete successfully. Our policy at the present time is to subdue the energies of the manufacturers, and at the same time bring the raw material of other countries into our own glutted markets on better terms than the wool grown by our own farmers—thus killing off both the manufacturing and agricultural interests with the same two edged sword—"an amendment of the tariff." We hope that the wool growers of the northwest will at last open their eyes and see the true policy which they should adopt, and that they will learn there can be no market for their wool abroad at remunerating prices. The wool raised here must be sold in the home market, if it is

to be disposed of at steady and remunerating rates; and that very home market must be created by the demand from manufactories amongst ourselves. The home supplies of other countries forbids an export from the United States, and the figures above given should teach us that the great manufacturing nations will use up their own wool in preference to ours, or that of any other nation. For an instance of this, look at the exports of Spain: she has but few manufactories, she raises the finest wools, and England finding that she could not produce the fine and coarse wools together, which were needed by her various fabrics, was for a long time her best customer. It should naturally have been expected that an increase in the manufacturing energies of Great Britain would have promoted the growth and export of the fine wool of Spain; but instead England has found that her own colonial possessions can yield her all the fine wools she needs, and she therefore turns her back upon Spain, and resorts to the countries that can grow the coarse wools on the lowest terms, the large supply of fine wool rendering a greater amount of coarse wool necessary than there is grown in Great Britain and its dependencies.

The last attempt to cobble up an amendment of the tariff that would aid the manufacturer, resulted most disastrously both to him and to the woolgrower, for it has become evident that the interests of the one cannot be affected without the interests of the other directly participating. For years the wool producer has set himself against the interests of the manufacturer, and one of the consequences of that opposition was, that at the session of Congress for 1856, the manufacturers undertook to build up their particular interests at the expense of the woolgrowers, by insisting on a repeal of the duties levied on imported wools; but a third party took a share in the discussion, and proved too powerful for either—the cotton growers stepped into the ring and used up both, by not only taking the duties off foreign wool, which unquestionably injured the woolgrower, but by reducing the duties on manufactured goods, an operation, which at the same stroke pulled the underpinning from both manufacturer and woolgrower, and materially enhanced the cottongrowing interests, as by the low imposts that killed off the woolen interests the foreign cotton manufacturer was enabled to pay a higher price for his raw cotton: hence the prices of cotton have never ruled higher than since the late ill advised change in the tariff; nor has wool ruled lower.

It is probable that at the next session of Congress, the necessities of the country will require a revision of the imposts on the productions of other countries, and it is to be hoped that then the true interests of the woolgrowers will not be forgotten, nor that such mistakes will be made by their representatives as occurred at the late revision, when the whole delega-

tion from this state sustained a change that has resulted in damaging all whom they sought to benefit.

We have advantages for manufacturing in this state as yet unknown and untold; and no man can visit the mills now in partial operation at Milford, Ann Arbor, and Battle Creek, without desiring that they might be kept at work the year round, with double or treble the number of looms that are now at work but a part of the time. Yet our whole system is nothing but a device to crush such works into their own milldams.

What is the Thorough bred Horse?—The Pedigree of Imported Messenger.

There seem to be very erroneous notions on the subject of the thoroughbred horse, amongst a large class of men who take a great interest in breeding horses,—and even amongst many who expend considerable sums in the improvement of their stock. Probably a few remarks on the origin, qualities, and capabilities of this variety of the horse may not be uninteresting or unimportant, and may tend to dispel some remarkable illusions which seem to cloud the judgments of many, who never think of a thoroughbred horse without having an idea that this noblest of all animals has a strong resemblance to a pack of cards or a dice box. Thus confounding the animal and all his excellences with the vices of his owner or his master.

The only country to which we look for a special breed of horses distinguished for the greatest speed, combined with power to keep it up for the longest distance, and at the same time carry heavy comparative weights, is England. Hence it is that all countries resort thither for the best stock, with which their own horses may be improved. There are several distinct breeds in England, each of which has long been distinguished for peculiar qualities, but all intelligent breeders concede that the "thorough bred," "blood" or "race horse," is at the head of the list, and is the most valuable. A cross with the thoroughbred invariably improves, and gives more courage, endurance and action to the progeny of all other breeds, whilst the cross of any other stock on the thoroughbred, invariably gives a progeny not equal to the racer in speed, or lasting powers. So well known is this axiom, that in great trials of speed, for long distances, no animal is ever entered that is not what is called "thoroughbred;" and even when the horses have a very high cross of the racing stock but yet have a trace or fraction of other blood, they invariably give out when put on a trial of speed and endurance, with the pure well bred racer. Some years ago Steeple Chase races of half bred horses were established in the north of England, in which it was found that the higher bred was the horse the surer he was of winning; and after a time, some of the second rate thoroughbreds, which were

found not to possess qualities suiting them for the race course, were sent by their owners to be entered for these steeple chases. The consequences were that thoroughbreds carried off all the prizes, and a rule was made by the clubs that in these races for half bred horses, no horse should be permitted to run that was for eight generations bred up by crossing solely upon racing stock. Thus showing that a horse that had only one one-hundred and twenty-eighth part of common breeding, was not considered equal for endurance and action to a second or third rate thoroughbred. If therefore the breeding makes such a difference in the horse, may we not well be asked, what is the thoroughbred? Is he Arabian, African, Spanish or English, or is he not a compound of the whole?

We answer the thoroughbred horse is neither, he is an animal possessing naturally certain peculiar characteristics, which have been still further developed and fixed by an immense expenditure of skill, science and capital, during the last two hundred and fifty years, in crossing, training, and breeding. This union, therefore, has developed an animal whose whole form combines the utmost agility or action, with greatest strength. It has need therefore of a peculiar conformation, and this probably is as strikingly displayed in the bones as in any other part of the body. If we take the bone of the common cart horse, or of any other horse of common stock, it will be found to be open in its tissue, the fibrous matter of which it is composed is not closely knitted, and compact; light in weight, and its substance porous; the bone of the thoroughbred is the reverse of all this, being close, firm, hard, like ivory, and weighing heavily when put into the scales. It is said that the shank bone of a thoroughbred, will weigh down the same bone of the heaviest draft horse, though in size the first is not half the bulk of the latter. It will be noticed that this is a radical difference, and one which is shared by all the Asiatic or African horses, of well bred stock, such as the Arabian, Turkish and Barb horses, which were resorted to for purposes of improvement by the early breeders; and which seems to have been a characteristic of the old Spanish race of horses, and which we may suppose were the descendants of the "fleet Andalusians" which were the theme of admiration of both prose and poetical writers amongst the ancients.

The development of the horse of the greatest speed was commenced in England, in the reign of King James the First, and has continued increasing in importance from his day until the present time, being nearly two centuries and a half. During those two hundred and fifty years, all sorts of experiments and trials have been made to produce a breed, or a cross that would be more valuable for all the qualities which the race horse has been known to possess, and particularly to obtain horses for breeding purposes,

which could be used, without having the progeny deteriorate. Every attempt of the kind has failed, and the thoroughbred horse still stands as the highest type of the race, and as the only variety of the horse which can be used to improve all other breeds in the three great characteristics of speed, endurance, and courage.

The thoroughbred horse is not a full bred Asiatic, as many suppose. Previous to the introduction of the Eastern horse for breeding purposes, large massive horses, of good action and great courage, were in demand for the purpose of carrying the heavily armed knights and fighting men of the time, and from the best selected mares of the native breeds crossed with the eastern stallions and also by a system of recrossing, and selection after trial, arose that famous breed, which is now considered the most valuable in the world. It is not necessary to go at present into all the particulars of the history of the thoroughbred horse. We shall only revert to one well known example to illustrate the whole system, and in doing this we shall take occasion to answer the question, "What is a thoroughbred?" from different points, showing by means of the ancestors of Messenger, that the thoroughbred is a combination of the best qualities of several native breeds.

Every American Horseman is well acquainted with the name, at least, of *Imported Messenger*; and we have constant references, year after year to breeding mares, and the dams of choice and sometimes of very un-choice stallions, as being of Messenger stock; yet few individuals, if asked what they meant by the term "Messenger Mare," could tell, except that she had a good amount of the blood of the "Old horse" in her. But how much or how very little, it would be impossible for any of them to say, as hardly a man that uses the term knows where Messenger was born, or where he died or what he was!

Messenger was foaled in 1780, and died in 1808, being now dead 50 years. He was imported in 1791, by a Mr. Bengel, and was afterwards purchased by Mr. Van Ranst, who states in a letter to the editor of the Turf Register, that Messenger was a light dapple gray, when he was landed, but afterwards became white. He was a remarkable stock getter, and from the purity of his blood and excellent constitution, seems to have been able to perpetuate his good qualities to his descendants. He is also as celebrated for his power of getting running stock, when paired with racing mares, as for getting trotting stock when used with the common mares of the country. It may be well to contrast this horse in this respect with the noted Justin Morgan, who never got a racer, and none of whose descendants are ever likely to produce a horse of the highest type for speed and endurance, and which is easily accounted for by the fact that no mongrel, chance horse, or half breed has ever yet competed successfully with a full bred horse.

The pedigree of *Imported Messenger* runs by the sire's side thus: 1. Mambrino, 2. Engineer, 3. Sampson, 4. Blaze, 5. Childers, 6. Darly Arabian. By the dam, which had for her sire of 1. Regulus; 2. Godolphin Barb.

Now the above looks all eastern, and as if the blood of the horse of eastern Asia, and of western Africa had alone united to form the blood horse, of which we are all so pleased to have some tincture in our stock. But we must carry the pedigree outside of the direct line of sires on either side, and take up the dams and grandams.

1. Mambrino had for a dam, a daughter of Cade, (the son of the Godolphin and Roxana), by a daughter of Favorite; Favorite was a granddaughter of Sir F. Gascoigne's foreign horse, and an *unknown mare*.

Here it may well be supposed that this unknown mare was a choice well selected animal, with or without a trace of eastern blood, but very likely to have a trace, from the fact that there were very many choice horses, bred from Spanish stock, in the country at that time.

2. Engineer was got by Sampson out of a daughter of young Grey Hound; she was a daughter of Curwen's Bay Barb, by an *unknown mare*.

3. Sampson was from Blaze, by a daughter of Hip (he from Curwen's Bay Barb and a sister to By Betty); she was a granddaughter of Lord D'Arcy's Queen. Sampson was very remarkable for size and coarseness, and in appearance showed little of the fine proportions of his oriental origin.

4. Blaze was a son of the celebrated Childers, from a granddaughter of Brownlow's Turk and an *unknown mare*.

5. Childers was the celebrated son of the Darley Arabian, by Betty Leeds; she was a daughter of Careless (a son of Spanker by a Barb mare), and out of a sister to Leeds; she from the Leeds Arab, and a daughter of Spanker, got by Spanker from his own dam, (Spanker was a son of the Yellow Turk, from a daughter of the Morocco Barb, and an Arab mare called Old Bald Peg).

The above shows very plainly from what stock Messenger came on the side of the sire; and that there was much careful crossing of strains of blood from various sources, principally on the sire's side from the eastern stock, but not from any one family or particular horse, but from the *hardest tried and best known* animals of the kind for speed, action and endurance—a principle the direct reverse of the dogma sought to be inculcated by Morgan and Black Hawk breeders, who teach that any trace, no matter how slight of the blood of a certain half bred stallion is an endorsement sufficient to enable every breeder to dispense with every qualification that had been deemed a requisite merit in a stock horse, up to the advent of David Hill, as a breeder.

Let us now trace back Messenger on the side of the dam :

1. Messenger's dam was not named, being put down in the stud books as a "Regulus mare." She was foaled by a daughter of Bolton's Starling (*a*), and Snap's dam (*b*), and was sired by Regulus who was out of a mare sired by the Bald Galloway; she from a mare sired by Snake; she from a mare by Gray Hautboy and an *unknown dam*.

The Bald Galloway was from St. Victor's Barb, and a daughter of Whynot and a Royal mare. (Whynot being from Fenwick's Barb, and an *unknown dam*. Snake was from the Lister Turk, and a daughter of Hautboy and an *unknown dam*. Hautboy was from the Darcy White Turk, and a Royal mare. (The Royal mares were two Barbs imported by the command of Charles the Second, and their progeny has always the first rank amongst the thoroughbred.)

2. The Godolphin Barb sired Regulus; this horse is sometimes called the Godolphin Arabian, but it is now generally allowed that he was African and not Asiatic.

a. Bolton's Starling was from Bay Bolton, and a daughter of the Brownlow Turk. Bay Bolton being the son of Gray Hautboy, (who was from Hautboy and an *unknown mare*), and a daughter of Makeless, and an *unknown mare*.

b. Snap was a grandson of Childers, by a mare that was the granddaughter of Hautboy and also of Bay Bolton, and in direct descent by the maternal side in four generations, from the Byerly Turk, and an *unknown dam*.

It would be useless to carry this pedigree further, as it will be seen from it that the thoroughbred stock of Great Britain, does not owe all its properties of size, unrivalled speed, and unflinching bottom, to any one race, but to a practical discrimination in the selection of mares, and the development of the progeny by training and trial, discarding from time to time from the stud all colts that proved themselves unfit or unable to compete in the great trials of speed and strength, until at last the form, and qualities became fixed, in such a degree, that a new family or tribe was established, that not only was far superior to the horses of their own country, but was superior to the horses of every other country, and in fact was more speedy, more lasting, and more reliable than the horses of Arabia, of Turkey, or of Barbary, from whence their ancestors had sprung; beating in all trials, not only the best Turks, Arabs and Barbs with which they came in competition; but even winning of late years in all cases, where the best Eastern blood had been crossed with their own, and thus proving that neither Barb Turk, nor Arabian is thoroughbred, though more closely allied to that stock than any other family.

Messenger as thus shown, includes in his ancestors

many of the most celebrated founders of the thoroughbreds of Great Britain. He proved by his progeny how much a first class thoroughbred could improve the common stock, and that even in size there need be no depreciation. And certainly the practice which wrought such a benefit to the stock of horses in the United States, is not one which should be lightly set aside by the breeders of the present day, as it seems to be by some of those who assume to dictate on the subject, and who would have us believe that a mongrel or half breed; or rather that a cross between the undersized French or Norman horse, and an indefinite and unknown amount of racing blood, crossed upon itself and the commonest mares, will produce more valuable horses than pure, well bred descendants of the tried and tested direct progeny of the best crosses of the Arabian, the Barb, the Turk, the Spanish and the English native, which the world has ever seen! Can any breeder be so destitute of common sense as to believe such a direct contradiction of every rudimentary principle of breeding?

The pernicious influence of Water, and Watery food on young Stock.

There is too little attention paid to the feeding of young stock, and we find frequently that many valuable animals are lost from diseases of the bowels, which arise from no known cause. A French writer notices this fact, and observes that the assimilation of nourishing matters is in proportion to the energy of the digestive passages; and if the digestive organs, are relaxed by an excess of drink, or by food that contains more water than the animal needs, then there is a loss of growth, and also a loss of time.

Animals drink only when they are thirsty, and their own instinct is the best rule; but the ignorant feeder frequently endeavors to force more water into the young animal than it needs by mixing the food which it likes with water, and thus exciting it to drink more than it needs. It may be noticed that a great number of very good cows, which give a large quantity of milk, are poor nurses, and seldom have thrifty calves. The reason of this may be found in the fact that the calf which depends upon such a cow, has to swallow a large quantity of water in which there is little nutriment, before it can obtain enough to satisfy its appetite. The nutritive matter floats on such a large quantity of water, that it cannot be assimilated, and the water itself relaxes and loosens the alimentary channels so that they perform their functions imperfectly. The calf consequently remains poor, its muscular system is not filled out, and whilst its paunch is full, its bones are sticking through its skin in every direction.

The cause of this state is easily explained. The stomach and the alimentary canal are dilated under the pressure of the mass, of food which has been swal-

lowed, and they crowd the lungs; consequently the respiratory organs cannot be filled, and are constrained in their action, the ribs are bowed out under the weight of the intestines, the chest cannot develop itself, and the breast remains narrow, and badly shaped. The young animal thus raised is always defective. A calf will seldom be seen to drink if allowed to suckle a cow that is a good milker, even where it is fed crushed grain or meal of any kind. Though water should be kept within its reach in our hot, dry climate.

It may be remarked that calves are sometimes subject to a diarrhea or scours in the spring; this arises solely from the watery nature of the food on which their dams are fed; for at this time, the young grass and clover contain a very large proportion of water, and, to obtain the nutriment required, a vast quantity of water has to be swallowed. The remedy in all such cases, is to give a drier food, and one which is more nourishing in proportion to its bulk.

Amongst hogs the effect of this treatment is very perceptible, and if we go into almost any barnyard at the present time, the litters of young pigs will be found in a shape which shows that they have been improperly fed. Whilst the young pigs are with the sow, and she is fed reasonably well, the pigs are straight on the back, round, with bodies and heads well proportioned; but as soon as they are taken from their dam, they are fed the swill and dishwater of the house, which contains a very large proportion of water, and the least possible quantity of solid food; the immediate consequences are, that the belly of the pig bloats out, and hangs down, the muscles of the hips and shoulders dwindle away, the head looks as though it were too large to be carried around with convenience or ease to the animal; the neck fades into a bundle of tendons without any muscle or flesh; the chest becomes narrow and lean, and the back is humped up. We are very sure that our readers will be able to see any quantity of this kind of animals in their neighborhood, and wherever they are, let them be put down as specimens of the effects of too much water and too little food. A pig once let down in this way for two months of the time when he should be growing, is a decided loss to the breeder, for not only has he lost all the time and food that the animal has already used up, but it will take a large quantity of food, and considerable time to bring the animal back into a condition and shape that will fit him to make the most of the food on which he is to be fattened for market. Feeders should bear in mind that water is not food, though necessary to enable the animal to convert food into pork or beef.

✧ A letter from Mr. Wilson of Noble Centre states that the wheat, which is now being thrashed out, averages not more than five or six bushels to the acre. Letters from other localities in the eastern counties are not more encouraging.

The Weevil and Mediterranean Wheat and Draining.

In a letter addressed to the Detroit Advertiser, Mr. Henry W. Lord, of Pontiac, under date of June 28, remarks:

"The excessively hot weather of the last week has brought forward the wheat crop with astonishing rapidity. It looks remarkably well on the ground, but on examination is found to be badly infested with the weevil, or the midge, as some call it. I enclose with this letter a head of white wheat in which you will find the little red nuisance, drawing out the milk of the just forming berry, and collecting a tax of more than a million dollars from the farmers of our State. The crop of last year was diminished in quantity at least one-third, and depreciated as much more in price by this new pest; and the prospect is, that we shall suffer still more severely this year. Many fields will be entirely destroyed, and, like the farmers of New York, we may be driven entirely from wheat culture, which, in some towns in this county, has been already the case, to a great extent. White winter wheat has been raised exclusively in this vicinity for many years, and the quality, until the appearance of the weevil two years since, was always of the very best.

One object of this letter is to direct the attention of farmers to Mediterranean (red winter) wheat. I have noticed last season that the early wheat suffered much less than that which, for any cause, was a few days later; and knowing that the Mediterranean was a little earlier than the earliest white, if well got in, I sent to Kalamazoo for seed enough to sow 45 acres—which I sowed the first week in September; and, at the same time, sowed about five acres of white, which was surrounded on three sides by the fields of Mediterranean. It all grew well, and stands very heavy on the ground. The Mediterranean will be ready for harvest one week from to day, (July 5th;) the white wheat will be ten days later. The Mediterranean is *entirely free* of weevil and now so forward as to be out of danger. The white wheat is nearly ruined by the insect. I did see, however, last year, some small fields of Mediterranean wheat sown for experiment, which were as badly injured as any crop of white wheat; but they were on heavy, wet clay soils, on which the Mediterranean was actually *later* than white wheat in both situations.

I give you above the result of my own experience this year."

That the weevil has fixed its habitat permanently amongst us there can be no doubt, and that it is extending "its area" is evident. As yet no means have been devised which can free us from its attacks, except we take a hint from the experience we have had with the Mediterranean variety, and attempt to originate new varieties, which will possess the early maturing quality as well as the hardness of outside covering, which that variety seems to have in a peculiar degree. Why would not a cross of the White Flint with a male plant of the Mediterranean give us a new variety, that by again crossing carefully upon itself would at last produce a grain having the plumpness, fineness of farina, and milling quality of the Flint with the hard coat of the Mediterranean? To grow a new variety of such a plant as wheat, re-

quires the utmost skill of the seedsman, as well as the science of the botanist, and is not to be done by chance or by the ignorant. No trial of the kind has ever yet been made in this country, all the known varieties have originated by chance, and not by any design of the grower. We presume that a new variety, warranted to withstand the attacks of the insect, would pay the originator well.

It is evident from observations made for the past three or four years that wheat sown early has a better chance than that which is late sown to escape the ravages of the weevil. But there is also another point, which it may be well to note. Much of our timber land, where wheat grows best, is undrained, and although wheat may be sown early, the retentive nature of the soil, which has not any drainage, renders the land cold, and the wheat does not grow any faster than if it were sown later. The crop is not advanced as much as it ought to be on the approach of winter, and when spring opens, instead of being in a condition to grow out of the reach of the weevil or worm, it generally has a hard struggle to live over the effects of the accumulation of water which fills the ground after the spring rains. We believe with Mr. Johnston of Geneva, that draining on our timbered lands would have a good effect in enabling many to partially escape or evade the weevil. We have noted many fields this season where the wheat has ripened so rapidly that the weevil has been able to do but little damage, and this seems to be the case where early sowing, and good drainage have gone together, owing to a favorable subsoil. If to early sowing and good drainage with proper cultivation, we can add an early variety of wheat, we may yet be able to snap our fingers at the *Cecydonia Triticum*. A full description of this insect will be found in the *FARMER* for 1857, page 239.

When we speak of draining in this connection, we mean such draining as will convey from the surface to proper outlets, a fall of rain, averaging from three to four inches in less than twelve hours after the rain has stopped falling. This cannot be done by single channels running across a twenty acre lot. It must be done by a range of small drains of moderate length conducting into one or more large channels which have good outlets to convey the water off as fast as it runs into them. These small drains, would need to be as close together as from 25, to 40 feet, the stiffness of the soil being the guide as to the necessity of their distance from each other.

The farmers of Oakland county ought to prosecute draining in a thorough manner with comparative ease, as they have in their midst at Birmingham, one of the best tile factories in the United States, as well as one of the best of tile makers.

A few facts about Draining.

In the *Ohio Farmer*, John Johnston of Geneva, N. Y., writes, "Previous to 1835, I met with several severe losses by the wheat freezing out, or winter

killing, as it is called, but spring killing should be the name. I had been reading for several years of the wonders worked on land in Scotland by tile draining, and in 1835, sent for a few tile from that country, in order to have some made here; but it was not till 1838, that I could find a man who could make them. In that year, and again in 1843, I, along with others had the misfortune of losing the whole of my crops by hail storms. This crippled my efforts in draining, yet I still continued doing considerable, as I found that the excess of two crops would always pay back the cost, and on some of the wettest land, even the excess of the first crop would do a great deal more than pay the whole expense of draining. There was no spring killing on the drained land.

"Thorough draining hastens the maturity of wheat wonderfully, which thereby escapes the midge. Before my neighbors drained their lands I have seen their crops so injured by this insect that they did not have more than five or seven bushels to the acre, while I would have twenty-eight to thirty-three, and I lost some by the midge also."

"Mr. Editor—You may tell J. M. Ellis he can have 2 inch tile for \$8.00 per 1000, and for less, if he goes to work and manufactures them; 3 inch for \$9.00, and 4 inch for \$11.00. The true way where ever draining is needed (and that is every where, more or less, wherever I have travelled) is for one or more farmers to erect tile works, and make their own, and supply their neighbors. Had I done so, when I commenced draining, my tiles would have cost me nothing, and I have laid over two hundred thousand.

"There ought to be tile works every ten miles through a large section of Ohio. Five miles is far enough to draw tile. Any man can manufacture tile, but a potter will understand the burning of them best.—*Letter to the Ohio Cultivator by John Johnston.*

Formation and Characteristics of the Horse.

Concluded from page 168.

Contracted looking, diseased feet arise chiefly from hereditary tendency and improper management. The colt-breaker, not knowingly, frequently settles this tendency and establishes the foundation, and all the care imaginable can never after totally remove the appearance and strog disposition engendered to contraction. There is something about the appearance of a healthy foot in a horse, when once understood and appreciated, that can never be forgotten. Having cursorily glanced at the fore limb, we may next take a look at the chest. Some horses give you the impression of having a chest; others, a very vague idea of what it should be. Remember, the lungs of a horse are the organs that enable him to purify his blood, and unless pure blood circulates freely through his body how can he, without injury to himself, perform the severe exertion we at times ask him to undergo? The chest is the barrel that holds these important purifiers of the blood, and

the larger in proportion, with due regard to formation, it is, the better. A chest may be, and often is, largo-looking to the eye of a casual observer, and not well formed and adapted to the purpose for which it is required. On the contrary, it may be clumsy and burdensome, rather than otherwise. In a passive state some horses' chests may measure much larger than others, and yet not half so well adapted for the purpose for which it is required. The chest of a thoroughbred horse is very different from a cart-horse in formation; generally speaking, the former's chest appears small, nevertheless, the formation is beautiful in the extreme, and the adaptation of a well-formed thoroughbred horse's chest is perfection for the purpose for which it is required. The formation is grand, being deep anteriorly between the shoulders, not particularly large round the girth (like as a bullock ought to be), but extends back close up to the hips, with a good fair width along the back, and deep, long back ribs, not round like a barrel, moderately sprung only, so that the muscles, when called into action, can expand the chest to an enormous size, comparatively for its passive circumference, and thereby enable the lungs to be inflated with an immense quantity of atmospheric air, at each inspiration—a much greater quantity than would be practicable under any other formation. A round chest, with light back-ribs, is not well adapted for a breathing apparatus. Nature sometimes ordains for this obviating a deeper girth, and this formation compensates somewhat for the want of depth in the back ribs, which should never be absent in a beautifully formed chest. Light back ribbed horses are generally irritable, weak, washy-constituted animals, that require great care, and very little work, particularly when there is much space between the last rib and the hip. Horses that are fed up, and have done but little exercise, are made to appear to have much deeper ribs than they really have. If the ribs are deep and well formed, the horse, when quite in hard work, should appear to have a belly, and not tuck up to nothing, at the end of a moderate day's work, although perhaps, his bowels may be empty of all food. A horse, with this formation, will be found to have a sound, strong constitution, and can do any reasonable amount of work, without distressing himself, and will not become irritable.

The back of a horse should be strong, a good length, not arched, to ride agreeably and safely upon, and a low back shows more weakness; either a high, arched or low back ought to be avoided. A broad loin, with a powerful muscle running along each side of the back, is of the utmost importance, coming from the hips, and called technically, the "*longissimus dorsi*." This muscle is an immense one, and by its means the horse can, when the hind quarters are made the fixed point, rear; on the other hand, when the fore quarters are the fixed point, it enables the animal to kick. It extends from the hind quarters to the withers and ribs of the fore part of the horse, and its strong-marked development is of great consideration. If the fore-legs were cut from under the horse, those muscles would, making the hind legs the fixed point, enable him to stand without falling suddenly; hence, horses with well-formed hind-quarters, with these muscles well developed, and good shoulders, seldom fall, whatever their fore-legs may be.

We now come to the formation of the hind-quarters, the propellers of the whole machine. For racing purposes, horizontal long quarters are best adapted

that go well into the back, with a good width between the hips, and well covered with firm muscle, square-looking, not picked, when looked at from behind. The tail should not be placed too high, but fairly; not droop suddenly between the two prominent bones that form the posterior part of the pelvis. From the extreme bony point of the pelvis on each side of the tail to the hip, the length should appear great, sideways, and the hind-quarters should be well attached to the barrel, without the slack, loose gait, and great width observable between the hip and the first or last rib. If the hind-quarters are not firmly attached, and very strongly knit to the fore-quarters by means of a good, firm, wide, muscular back, without being arched, to give a disagreeable, unpleasant, cockling seat when mounted, you can hardly expect great endurance and muscular power to be long and continuously sustained. You may have immense width of hips and quarters, and great shoulders, with a moderate-sized looking back, carry great weight, and endure great fatigue; these kind of horses cannot repeat the dose so frequently as those with equal hips and shoulders, and a good firm back—I do not mean a rigid, stiff back; nothing is more detestable or more likely to throw a horse down, should an accident befall him. Horses with very wide, prominent hips, sometimes carry very little muscle about the stifles; hips, well covered with a bulge of muscle, and this muscular power, equal in width about the stifles, when looking from behind is preferable. When the pelvis is horizontally formed, the hip-joint and leg swing like the pendulum of a clock, and the horse is enabled to bring his stifles well under the belly, and forward in action; this causes a better development of these muscles, which act with less exertion, and can be longer sustained in active exertion. Unless the thighs are large and well filled up, with muscles extending down to the hocks, when horses are bare in flesh, they seldom increase in the desired proportion, as one would wish them; from the stifle-joint to the hock-joint, there should not be too great leverage, and not much space between the lower muscles of the thigh and hock, with a horizontal quarters; the hind-leg like that of a hare, can afford to be longer, and gain leverage and length, without the great cranks and angles that cause so much stress to be thrown on particular parts when the quarters are drooping, i. e., the position of a hind-leg should be from the hip-joint downwards straighter in its formation than is often witnessed, to be perfect on, and to make up for the cranks, it can afford to be longer; the point of leverage from the hip to the hock should be great, but not out of proportion; and the point of the hock from which the muscles act when the toe of the foot is made the fixed point, should not project out so far as to form an angle or neck on the anterior and lower bones of the hock-joint, in the seat of spavin, as that throws more stress on this part than down the ligaments of the hind part of the limb. The hock-joint, when properly formed, is peculiar in this respect, as being inclined to what is termed a straight hock, not a necky angular hock, but a deep, strong, broad, long hock, and broad round the lower part, or upper part of the leg. A hock of this description is capable of greater flexion and extension, and not liable to spavin or curb, or unequal stress, which is the cause of disease. Horses possessing straight, deep hocks, are considerably more valuable for hunting purposes, where sudden and uncalled for stress is frequently thrown on the hocks, from the point of the

hock being the medium between the action of the muscles above, and the foot being fixed below; besides which, horses with these formed hocks can throw themselves further and stronger from behind—owing to the formation of the limbs being, generally speaking, differently arranged. Having spoken of the hocks, we now come to hind extremities. The hind legs, I need not remark, should be larger and much stronger in proportion than the fore-limbs; tendons and bones ought all to be larger, and contain more substance, with a moderately oblique fetlock, to give spring and elasticity to the animal's movements. If the fetlocks are large enough, they are sure to be capable of sustaining the amount of muscular force brought to bear on it, without some particular part being compelled to give way. If it is truly formed, and the power of the hind-quarters is equally distributed over the whole limb, which it will be, there is no danger of this or that giving way, and no fear need be entertained, as is too often the case, when malformation enters into any portion of the animal's structure, that the horse may go out sound, and return, after severe exertion, unsound, unless some slip or accident should happen; then the best-formed machinery is liable to rupture, and bone sinew likewise.

Having then selected a horse from appearance, standing still, with perfection of make and shape throughout his frame, we need hardly look for disease; and if we do, and find it, nine times out of ten, it arises from abuse, and not use. If you select a horse well formed, there is but little risk of his giving you every satisfaction, providing his action is free, easy, true, and what it ought to be, and he is well-bred, without cunning tricks, with a good determined heart in his body—which can only be proved by putting his capabilities, when in condition, to the test. How can a man value an animal of this description? And how can he, if he wants to be served at little expense, leave such an animal, if a reasonable sum of money be asked in exchange for such a treasure? The reason so many men are prevented from giving money for good animals is, that they have, perhaps, time after time, paid the price, and not succeeded in their selection. If they blindly trust what men tell them and not their own faculties, and purchase horses from character, which the formation does not justify them in looking at twice, then they deserve to be cheated, and must pocket the result of their own stupidity.

In conclusion, I would remark: that good horses ride or do what is required of them, in any bridle; all saddles fit them; any blacksmith can shoe them; all countries and all climates suit them; with moderate care and attention they are always at your command, depending entirely upon their owner as to the condition he chooses to keep them in; seldom sick nor ailing, giving their owners much pleasure and gratification whilst living, and a pleasing, never-to-be-forgotten remembrance of their faithful services when dead and gone."

On Planning for Draining.

There are many who would like to attempt draining, or who would like to make a trial of it on portions of their land, did they know how to begin, or where they were to get their material to drain with. Others have begun, but stop short, having met with difficulties they do not comprehend or understand.

The lands which are considered to need draining the most in this State, and in portions of Northern Indiana and Ohio, are large flat tracts of marsh, the soil of which is mostly composed of peat muck ranging from twelve inches to as many feet in depth. We have received quite a number of inquiries relative to the treatment of such lands, within a short time, and have put off their answer until we could give one which would be of service, and which would be adapted to the season; for August, September and October are the months in which this kind of work can be done to the best advantage.

In surveying a lot for the purpose of laying out drains, one of the first points to learn and determine upon, is the precise spot where the discharge of the water collected by all the drains from the whole lot shall be. It may be necessary to have two or more points of general discharge, but this can only be settled after a careful survey of the field. When at Burr Oak, some time since, we had the pleasure of inspecting the works begun by Mr. William Morris, for the purpose of improving a very large tract of marsh land, which forms a portion of his extensive farm, but which are yet in an unfinished state. The trenches which he had dug were as yet open, and some of them we found did not carry off the water, owing evidently to a want of attention on the part of the man who dug them, to the proper levels being maintained to give the water a regular fall. In planning drains, this is a defect that must be avoided. In the opening of the main, or drain leading to the outfall, it is necessary to preserve a gradual inclination in the bottom of the trench that the water may have a steady flow, and also to prevent any interruption by accumulations of sand or silt in low places, flowing in from the lateral drains.

Having determined from inspection or careful survey of the whole ground where the outfall must be, the next point to settle, will be the direction of the main channel, into which the side drains connected with it will have to flow, and also its size and the material of which it should be made.

In the ordinary marsh lands which are met with, there is generally some brook or creek that passes through or near them, the surface of which must be made the starting point, from whence the levels should be carried up. In many instances this work is done by guessing, or by judging of the surface by the eye, and as a matter of course the drain is dug imperfectly. We will suppose that it is desired to thorough drain a tract of marsh land a mile in extent each way; it may be necessary to have the main drain run through or near the middle of it, or it may be good policy to have the main drain run nearly at one side of the lot owing to the general inclination of the surface. But when once the direction on which it is to be run is settled, we may then

of, which is, that the main drains should invariably be straight and of sufficient capacity to convey off the water received from the collecting and branch drains, and all these latter should join the mains at an angle inclining in the direction of the flow of water.

We will suppose that the main drain for the conveyance of water to the outfall is fixed at the base of a slope having a descent of only one foot in 50 rods, and that it is desirable to plan out the other drains in connection, for the purpose of draining a piece of marsh land of any extent. Let the piece of land to be drained be of the shape indicated in fig. 5, *a, b*, being the location of the main drain, and

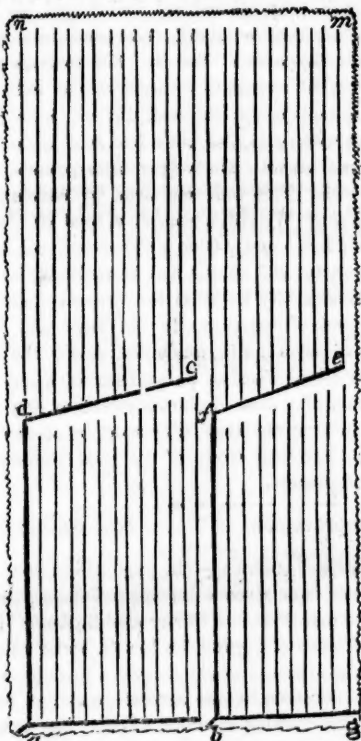


Fig. 5. Represents a lot 100 rods long, and 50 rods wide, drained on the most simple system. The fall from *n* to *a* is but two feet; from *m* to *e* six inches. Two discharge drains are represented at *a, f, b*, and at *c, d, a, d* dividing the system of drainage into four sections, each two of which discharge at *a* and at *b*.

m, n, the highest portion of the surface. The drains it will be seen, must be planned in the direction of *a, n*; but were the drains to be carried directly from *a* to *n*, the water would accumulate in such quantity at the lower end, that tiles of ordinary capacity would not permit it to flow off as rapidly as might be desirable. Hence halfway down the field either the tiles would have to be of larger size, or the drains would have to be divided into two or more ranges as the extent of land to be drained might require. The plan of division and of connection with a collecting drain, will be seen at *e, f*; and experience

has demonstrated that this system is more effectual and more economical than that of long drains without a break, as the construction of the collecting drain costs less than the large sized tile, and at the same time promotes a much more speedy dispersion of the sudden and heavy falls of rain to which our climate is liable.

The reason why collecting drains are needed will easily be understood, if we consider what each drain is required to do. Suppose the drains in figure 4 extended the whole length of the field, it would become necessary for the tiles at *a* to discharge twice the amount of water required of those at *d*. If the distance between each drain should be two rods, every lineal foot of drain would be required to convey the water from $16\frac{1}{2}$ square feet on either side, or 33 square feet of surface. If a fall of rain to the depth of one inch should occur, with the soil previously saturated, (which frequently occurs at the worst time for the farmer), there would be 340 gallons that would pass through the first rod of drain; the next rod would convey 680 gallons, and the fiftieth rod would have to pass 17,000: in this calculation no allowance is made for the dispersion of much of the rainfall by evaporation, which always dissipates a large proportion. It will now easily be seen that if the drains were the whole length of the field, or one hundred rods instead of fifty, the tiles in the lower half would have to convey off the 17,000 gallons which would be poured into them from the upper fifty rods, and also all the water which fell on the surface legitimately belonging to them, so that with a fall of one inch of rain, the lowest tiles would convey into the main over 34,000 gallons. The tiles at the lower end would, therefore, have to perform just one hundred times the amount of service required of those at the upper end. Hence in laying long drains the necessity of increasing the size of the channel to provide for the accumulated flow of water.

Nothing will illustrate the necessity of drainage more than the fact, that if the drains in fig. 4 were each 100 rods long, and had a fall of two feet in their whole length, and each carried off the water that fell on a rod on either side, it would take *eleven and a half* hours of uninterrupted flow from a pipe three inches in diameter, to discharge a fall of rain equal to an inch in depth over the whole surface. With this, and a three inch pipe, there would be a discharge of nearly 60 gallons per minute, and as the whole amount of water that fell on the surface calculated to be affected by the drain is 34,000 gallons, it is easily noted what time it would take. If this amount of time be occupied in getting rid of an inch of water, it will be easily understood how long it would take to carry off some of the rainfalls we have had the past spring, when nearly three or four inches fell in a single night, or within a few hours; and the same figures will serve to exemplify the amount of water that must flow on to marsh lands that are surrounded by rising grounds, from which the water flows both by surface and by percolation.

A short time amongst the Shorthorns.

When at Coldwater in June last, we went out as far as Mr. Crippen's farm to see Orpheus, and the stock at this place. Mr. C. has sold most of his young stock so that his herd is greatly reduced in numbers, compared to what they were a year ago. He has also lost Shaker Lady. Orpheus had not grown much during the past winter, and did not appear very different from what he was at the State Fair. We thought Orpheus had been kept too closely tied up, and believe that a little liberty in a well fenced paddock, would prove of the utmost service to him. We saw some of his calves, from choice cows of Mr. Crippen's herd, which in quality and form, as well as size, promised to be superior stock.

Mr. William Morris of Burr Oak, has a very fine white Shorthorn bull, which has brought him some choice calves, from very common cows this year. He had sixteen calves, all spotted red and white, and a very even lot. This bull of Mr. Morris has grown very much since his exhibition at the State Fair, and we should think was full one third heavier than when shown. He has a great deal of substance, is short on his legs, long in body, rather wanting in fullness at the shoulder, but otherwise very good. Mr. Morris is expecting another bull to be sent up from West Chester county, and would sell this animal at a reasonable rate. He is now four years old, a little lame, being injured in one of his legs when coming up on the cars, but, will prove a good bull in any locality. He was bred by Mr. Frank Morris from the stock of L. G. Morris of Mount Fordham.

At Ypsilanti, we have had several opportunities of seeing calves from Lenox, the young bull brought up from Rhinebeck by Mr. David Uhl about a year and a half ago. All the calves bred from this animal are distinguished for breadth and depth of chest. Last winter we saw two young calves at the farm of William Wilson, and both had a depth of chest and width of shoulder, with a fullness, that showed the breeding quality of the sire. Since that time we have seen several others of his stock which are equally promising in this respect. A calf from a favorite cow lately belonging to Mr. Ballard, for breadth and depth of chest, and squareness in the fore quarters, we have seldom seen equalled at his age.

Mr. Sly of Plymouth, has lately been adding to his stock. Last fall he exhibited some heifers and calves which he brought up from the herd of Mr. Haswell of Rensselaer county, N. Y. One of these heifers was from a cow that sold under the hammer of the executors of Mr. Haswell, a few months afterwards, for \$1200. She was in calf when brought up to the bull Duke of Athol, bred by Samuel Thorne of Thornedale, and has now brought a heifer calf roan in color of singular excellence and propor-

tion. Mr. Hial Sly, had just brought up from Ohio a favorite heifer with a red and white calf at her foot, sired by the renowned New Years Day, which had hardly recovered the fatigue of the trip, but which promises to be quite a prominent addition to this large and choice herd. Mr. Sly also brought a yearling bull, of great excellence in all his points; which he purchased from Mr. Jacob Pierce of Clark County Ohio. This bull is named Primus, is a beautiful rich deep roan in color, remarkably full and deep in chest and shoulder, back as straight as a bee line, very wide hips and broad loins, with remarkable depth of flank, and development of muscle. His head and neck, as well as his other extremities are fine, well proportioned and well shaped, his legs being neither long nor short. The head has a good deal of the character of Sirloin. His carriage is as gay and stylish as that of a thoroughbred colt, and altogether he is one of the most difficult animals to find fault with or to pick out a bad spot in that we have come across. He weighs 1100 pounds, and handles well. This bull was sired by Sirloin; his dam is Fanny Wright, a roan cow bred by Jacob Pierce of Clark county, Ohio, and her pedigree is recorded on page 363, of the Am. Herd Book, Vol. 3.

The Messrs. Sly have at the present time the largest herd of Shorthorns in the State and their sales have been quite numerous during the past year. With the blood of Balco, Duke of Athol, and New Years Day crossed into their herd, as they now have in their young stock, they must be able to furnish some excellent stock of the most fashionable blood and descent.

An Improvement in Clover Seed Gatherers.

ED. MICH. FARMER:—On page 233 of your last volume you have given a drawing and description of "A Good and Complete Clover seed Gatherer," built by Mr. Kinney of Plymouth; but in order to complete the machine, I would suggest a little improvement. I constructed one several years ago somewhat similar running on three wheels; the forward ones being connected by iron journals to a turned cylinder four inches in diameter revolving with the wheels over the rear ends of the teeth. Upon this cylinder are secured longitudinally two square bars of $\frac{5}{8}$ inch iron running very near to the teeth, which, as the cylinder revolved, scraped off the heads and throws them back into the box, a boy sitting behind removes them to the back part. No handles are attached; the rear being supported by the third wheel which turns on a swivel similar to the casters on furniture, capable of rolling in any direction. The rear end is elevated or depressed on the swivel so as to run high or low as may be desired.

As clover is a very important crop to the Michigan farmers, and the time for gathering the seed is near, the best means of doing it is a worthy subject of study. Respectfully Yours, J. C. ROGERS.

Grand Rapids, Mich.

Successful Orchard Planting.

In the June number of Hovey's Magazine of Horticulture, Mr. Leander Wetherell, gives the following instances of successful orchard planting with speedy returns, and as the article answers some of the queries of "Tyro," as well as exemplifies the benefits of the use of salt and lime, and the effects of careful mulching, it will suit our fruit growers, and repay a perusal:

"Mr. N. B. Chamberlain, Philosophical Instrument maker of this city, has a farm at Westborough, where he has, within a few years, set two thousand apple trees, located in three different lots. Two hundred of these were set in the spring of 1853, on the eastern slope of a hill—soil wet, subsoil clay, free from stone. In digging a well thirty-seven feet deep, the depth of the clay was not fathomed. The trees are sheltered from cold westerly winds.

Before setting the trees, the ground though new, was cultivated and manured well for two years. It was deeply ploughed. The holes for the trees were dug large and deep. They were planted and covered with the mellow tilth of the field. In 1854, a crop of corn was raised among the trees, and a crop of oats the following year, succeeded by clover. The second year the trees were mulched with grass cut green, and kept in large heaps until it heated and settled down. A quantity of this was put around each tree, this having been accidentally neglected the first year.

Great care was taken in selecting the trees, none being accepted but those of the best quality. Every tree grew. They are all of the Baldwin variety, and were set twenty-five feet apart. The trees were of good size, and a dozen of them fruited the first season after setting. A few bore the second and third years. On the fourth, every one of the two hundred trees produced fruit, some of the best having a peck apiece, others less. Every tree proved to be a Baldwin.

This lot of trees, having been properly trained in the nursery, had no more than four, nor less than three branches; none of these nearer the ground than five and a half feet. The trees were straight, and so are the rows, "lengthwise, crosswise and diagonally," adding, as some think, greatly to the beauty of this fine young orchard. Not a "primary limb" has been cut from one of these trees, clearly illustrating that, if trained well when young, they will not depart from it as they grow older. Another orchard, where the trees were less carefully selected, has cost the proprietor many dollars to remove redundant "primary limbs," causing injury to the trees, although the neglect of the nurseryman, thus proving, on the same farm, the importance of procuring trees that are right in every particular, for transplanting.

William Buckminster, Senior, Editor of the Massachusetts Ploughman, planted an orchard of three hundred trees in the spring of 1852, covering about three acres of land. They were set about twenty-five feet apart, and the ground tilled before and while the trees were growing. They were mulched with straw and hay; this keeps the soil light and moist about the roots, by preventing too rapid evaporation. Unless the mulching was buried on the approach of winter, it was removed to keep away the mice; banking is deemed preferable, as the decomposition of the mulching tends to fertilize and

thus promote the growth of the trees. Mr. Buckminster states that a number of his trees fruited the third year after setting. This orchard having been visited several times by the writer, he can bear testimony, from observation, to its elegant and very promising appearance.

The orchard of Moses Stebbins, of South Deerfield, set at intervals since 1845, containing now more than two hundred trees, is one of the finest exhibitions of what may be done in orchard culture in the State. It is located just above the alluvial of the Connecticut River, on the easterly sloping base of Sugar Mountain. The soil of this old pasture is of the new red sandstone formation. The working of it has turned out an immense quantity of small stones, which have been used for making a wall on the upper side, next to the pasture. The protection from northerly and westerly winds is all that could be desired.

Before setting the trees, Mr. Stebbins cultivated and fertilized the ground well, ploughing very deep, top-dressing liberally with a compost of salt and slack-lime. On two acres he spread on, and ploughed in six thousand pounds of lime and sixteen bushels of salt. One hundred and twenty trees were set on these two acres, and the ground has been tilled and cropped annually. In 1855 he raised fifty bushels of corn to the acre, using no other manure than five hundred pounds of guano sown broadcast and ploughed in. The trees receive a top-dressing of compost every spring, and nothing is permitted to grow under them. It is thought by many, and claimed by the proprietor, that the remarkable success attending the planting of this orchard is to be attributed, chiefly, to the liberal use of lime and salt. Having often visited this young orchard with its enterprising owner—who, by the way, is a model farmer, having one of the best and most highly improved farms in Western Massachusetts—and once as Chairman of the Committee on Fruit Trees of the Hampshire Agricultural Society, the writer does not hesitate to say that he considers this experiment as one of the best demonstrations of what may be done in apple culture that can be found in the State."

The Patent Office and its Agricultural Department.

The Patent Office is like every other institution—it has its opponents. We note that quite a demonstration has been made against its management by the members of the Pennsylvania Horticultural Society. It is charged that the funds have been misapplied owing to the incompetency of the clerk entrusted with the duties of selecting and sending for seed, and that in many cases seeds already widely disseminated, and some that have originated here, have been imported, and spread throughout the land, as new varieties of great value. Still it must be confessed, that many varieties of seeds have been introduced that were entirely new, and have been of much service, and in a business like that of selecting seeds, it would be a marvel if every one were satisfied, especially as it has to be entrusted, like a great many other important offices, more to a political favorite than to a man of ability and judgment.

Mr. D. J. Browne is the present incumbent; and

in reply to the strictures and criticism which had been elicited, there was a special inquiry made by a committee of Congress on his antecedents and qualifications as a proper person to fill that place. The committee reported decidedly in his favor, giving quite an *auto-biography* of Mr. Browne, and concluding by recommending him as a very competent person. With this report we agree, as we think that Mr. Browne is more competent than any who have preceded him in that position, and that some of the errors into which he has fallen are such as may be rectified, and the wholesome criticism of the press will aid very much to point out in what respect the duties of his office have been inefficiently performed, and how defects may be remedied.

Another complaint has been that the Patent Office Report has been inefficiently edited. The volume last issued, is far from being all we could wish it, as it is very defective in its statistical department, but certainly it will compare very favorably with its predecessors. The great trouble with this report, is that it is absolutely necessary to make it as voluminous as possible, for the benefit of binders, printers, and other contractors, who do the work, and it is impossible for one man to get up a volume of the kind, which will contain nothing but papers of merit, without he is at liberty to employ writers of the first class on the various subjects which he may desire to elucidate annually. This will not be done, and hence the clerk has to depend on voluntary contributions, or his own resources and abilities. We think that a few thousand dollars spent in paying writers for good articles on subjects connected with agriculture, instead of throwing away thousands upon trashy lithographs of cattle, that are far from correct, and which never can be of the least benefit to breeders, would have added far more to the character of the report, and would unquestionably have shown more wisdom in getting up such a volume. But then some two or three speculative engravers, and hangers on at the public crib, would not have received a dime for their valuable services to the country, so that the end and object of the Patent Office Report would not have been fulfilled. But for this Mr. Browne ought not to be blamed—had he not precedents to be followed, when he went into office? and Hercules himself was not asked to clean out the Augean Stable in twenty four hours?

Our Note Book—On the Southern Mich. R. R.

A brief visit along the Southern road afforded an opportunity of making a few notes on the stock in that section of the State; and of noticing what improvement had been made.

At Coldwater, we made a visit to the stables of A. C. Fiske, whose stock of horses is now very satisfactory, and affords a fair variety to choose from. He has also prepared close to his breeding stables a very well graded track of half a mile in extent which is now used for exercise and training purposes. We

saw several colts from his Blackhawk horse Hero, both two and three years old. They were of large size, and as the horse had been crossed on some large Ohio and Pennsylvania mares, these colts showed no lack in height, age being considered. The Othello or Black Prince horse has filled up considerably since we saw him twelve months ago, and we learn he has shown a good turn of speed. He is a stylish, well built, medium sized horse, apparently of good temper. As yet we have not seen any of his colts.

But the choice of this stable is certainly Defiance or Moscow, as he is termed. Why he is called Moscow, we do not know, as he is no relation to the original Moscow horse, but comes of better stock. Defiance is from the dam of the famous trotter Lady Moscow, by an imported horse called Defiance. This horse was said to be thoroughbred and certainly his son gives every evidence of his breeding, in all his points, showing in form, carriage, action and spirit his race and lineage. He is brown, with white feet, rather light, but compact, evincing in every movement great nervous energy and muscular power. We consider that this horse will do more to improve trotting stock than any horse yet introduced into that section. The horse called Gray Messenger shows much of the Messenger character, and he has many points that render him a good stock horse. With half or three quarter bred mares we would like his cross better than either of the Black Hawks.

Mr. F. V. Smith has several remarkably promising colts of various ages from the Green Mountain Black Hawk, which show in strong degree the style and character of their sire. The great difficulty met with here, lies in the want of all character on the part of the mares. Very few of them have any breeding, or have even been crosses of good families of mongrels, and it is rather a slow process to attempt to improve the stock of any section by the use of horses that have no definite character, but are themselves mongrels or less than half bred. In this respect Green Mountain Black Hawk was somewhat superior, and his progeny, though generally not remarkable for size, are very fine for style in carriage, and general docility. Mr. T. F. Parish of this place, has a very beautiful dark chestnut two years old, which makes a superb appearance in harness, and which was of such excellent temper that the first time it was put into a sulky it travelled off as calmly as an old hack. A grey two year old, the property of Mr. Clarke is remarkable for size and style, he now weighs close up to 1000 pounds. It is very probable that a large number of the colts of Green Mountain Black Hawk will be shown at the State Fair.

Further west, we found on the farm of Mr. Wm. Morris of Burr Oak, *Zingaro*, a five years old horse of wonderful substance and power for his size. In the words of one of the best judges, he is "the biggest little horse in the State." *Zingaro* is a beauty and as stout as a lion, with very blood like head and limbs, and an eye of fire. His loin and back are models, and he is deep flanked, and short on the legs. He ought to make his mark in this section, if purity of blood will tell in breeding. His pedigree and blood is equal to that of any blood horse in the United States, being sired by imported Trustee, out of Young Gipse, she from Gipse the dam of Pryor. Gipse was out of American Eclipse. The sire of Young Gipse was Mercer, imported, a son of Emilius, one of the most celebrated stock horses of Great Britain, and better known in this country as

being the sire of Priam. It is true that Zingaro is not of large size, but he is full as high as most of the Morgan stock, and we have the fullest confidence in the vigor and spirit that is shown on every point, will render his stock from common mares so superior for size and action, that they will prove his progeny to be very valuable.

Mr. Morris has been cutting some long ditches through a very extensive marsh which forms a part of his farm. In passing over this marsh, he called our attention to several islands, on which were trees of very large size. Of late years, and especially since cattle had been turned on, the trees had begun to die off, and several of the largest had fallen. It was a question with Mr. Morris what occasioned this sudden death. He imputed it to the interruption of the flow of water on the marsh, by the tread of cattle, which had so compacted the soil, that the water had been raised or rendered more stagnant around the roots, and that the tree had thus been killed. There may be other causes, and he would like to know if this death of the trees on these marsh islands had been observed by any of the readers of the FARMER.

Piazas on Dwellings.

Piazas are a cheap luxury; and yet, how many east, west and south doors of houses are exposed to the burning rays of the summer's sun. Every outside door of a dwelling, from the stately mansion to the log cabin, should have some kind of a screen or shelter, that would in kind or style, correspond with the house itself. A rough board roof, supported on pillars formed of the barked stems of young trees, and laid on poles for the rafters can be made to look as neat and as appropriate for the log house as the most graceful and artistic arabesque on the villa or country seat that has cost thousands. The piazza, though it may have no floor, but the close shaven sod, can be made the most comfortable resting place for the farmer and his family at noon or in the evening. And I am sure that no farmer, after enjoying the comfort that such a structure affords, would be without it another season for twice its cost. How many times do we find log houses on every road, with no shelter, and not even a bush to screen a single window from the July sun. Yet there is not an owner of one of these primitive structures, who might not by a single day's work have a simple addition that would add to its appearance, and give comfort and enjoyment to all its tenants. A little taste of this kind displayed by farmers, would be found also to give every one a better idea of their intelligence and industry. I hope, Mr. Editor, that you will call attention to this subject. H. P.

Victor, Clinton, 1858.

[We cannot do better than to give our correspondent's remarks, which we fully endorse as correct in every particular, and worthy to be adopted.—Ed.]

The American Pomological Society,

The Seventh Session of this National Institution will commence at Mozart Hall, 663 Broadway, in the city of New York, on Tuesday, the 14th day of September next, at 10 o'clock A. M., and will be continued for several successive days.

Among the objects of this meeting are the following: To bring together the most distinguished Pomologists of our land, and, by a free interchange of experience, to collect and diffuse such researches

and discoveries as have been recently made in the science of Pomology—to hear Reports of the various State Committees and other district associations—to revise and enlarge the Society's catalogue of Fruits—to assist in determining the synonyms by which the same fruit is known in America or Europe—to ascertain the relative value of varieties in different parts of our country—what are suitable for particular localities—what new sorts give promise of being worthy of dissemination—what are adapted to general cultivation; and, especially, to concert measures for the further advancement of the art and science of Pomology.

The remarkable and gratifying progress which has recently been made in this branch of rural industry, is in no small degree attributable to the establishment and salutary influences of our Horticultural and Pomological Societies, the proceedings of which have been widely promulgated by the Press. A great work has been already performed, but a greater still remains to be accomplished. It is, therefore, desirable that every State and Territory of the Union and the Provinces of British America should be ably and fully represented in this Convention, and the Pomological, Horticultural and Agricultural Societies, within these limits, are hereby requested to send such number of delegates as they may deem expedient. Nurserymen, fruit growers, and all others especially interested in Pomology, are also invited to be present, and to participate in the deliberations of the meeting.

Held as this Assembly will be, in the great commercial emporium of our country, easily accessible from all parts of this continent, and at the same time when the Convention of the Editors of the Agricultural Press will be in session, it is anticipated that the attendance will be larger than on any former occasion, and the beneficial results proportionably increased.

In order to increase as much as possible the utility of the occasion, and to facilitate business, members and delegates are requested to forward specimens of fruits grown in their respective districts, and esteemed worthy of notice; also, papers descriptive of their mode of cultivation—of diseases and insects injurious to vegetation—of remedies for the same, and to communicate whatever may aid in promoting the objects of the meeting. Each contributor is requested to make out a complete list of his specimens, and present the same with his fruits, that a report of all the varieties entered be submitted to the meeting as soon as practicable after its organization.

For the purpose of eliciting the most reliable information, the several Fruit Committees of States, and other local associations, are requested to forward to Hon. Samuel Walker, General Chairman of the Fruit Committee, Roxbury, Mass., or to P. Barry, Esq., Secretary of the Society, Rochester, N. Y., a definite answer to each of the following questions, at an early date, and prior to September 1st:

What six, twelve and twenty varieties of the APPLE are best adapted to a family orchard of one hundred trees, and how many of each sort should it contain? What varieties, and how many of each, are best for an orchard of one thousand trees, designed to bear fruit for the market?

What six and twelve varieties of the PEAR are best for family use on the Pear stock? What varieties and how many of these, are best adapted to a Pear orchard of one hundred or of one thousand trees?

What are the *six* and *twelve* best varieties of the PEACH for a family orchard? What are the best varieties, and how many of each, are best adapted to a Peach orchard of *one hundred* or of *one thousand* trees?

Answers to these questions should be made from reliable experience, and with reference to the proximity or remoteness of the market?

Societies will please transmit to the Secretary at an early day a list of the Delegates they have appointed.

Gentlemen desirous of becoming members can remit the admission fee to Thomas P. James, Esq. Treasurer, Philadelphia, who will furnish them with the Transactions of the Society.

Life Membership, twenty dollars; Biennial, two dollars.

Packages of Fruits may be addressed to Wm. S. Carpenter, Esq., 468 Pearl street, N. Y.

MARSHALL P. WILDER, PRESIDENT.
Boston, Mass.

P. BARRY, Esq., Secretary.
Rochester, N. Y.

Sustaining our own Paper.

MR. EDITOR, Sir:—I have just received a copy of the MICHIGAN FARMER, accompanied by an invitation to subscribe for the same. I think I have some just sense of the advantages to be derived from the general diffusion of statistical and scientific knowledge (on the subject of practical Agriculture) gathered from our own soil and coming under our own observation; a work which no foreign publication can ever do, and yet though I have been one of the *small* farmers of Michigan for the last few years, I have been patronizing an eastern publication instead of our home paper. Have I done right? I will give you my reasons for thus doing and you may judge. At the commencement of my agricultural enterprise, I subscribed for a paper which claimed to be the *Farmer's Companion*, and, with all the enthusiasm of a Freshman aspiring for collegiate honors, I hailed its regular visits regarding it as my infallible guide. The experience of persons actually engaged in the business! having with me at that time great weight, these items of news were the *pet morsels* after which my morbid appetite craved. Having a small farm and wishing to turn its products to the largest advantage, my first inquiry was, what kind of stock can I most profitably keep? On looking over my paper I found that it had (as I thought very wisely) divided the subjects on which it treated into departments, and among the most prominent was that of *Poultry* with a regular M. D. correspondent, and as the contributor was giving the result of actual experience, this department became unusually attractive to me. You will perhaps smile, but not be greatly surprised, I suppose, when I inform you that I decided to keep this kind of stock, and that in a short time I found that my confidential *Companion* and infallible guide, the regular corre-

spondent, of its *Foul* department, had led me into all the inextricable labyrinths of ridicule and derision and there left me to find my way out at my own expense. This department being nothing but a *Foul* advertisement, I could find no ear to listen to my complaints, and I was obliged to "pocket the insult" and keep mum. But, fortunately for me, there were plenty of other dupes who were panting to make the great *foul* experiment, and I was relieved of my stock in trade at such an advance as left me no ground for complaint.

But, say you, what has this to do with the question at issue? I'll tell you. The above incident has lessened my confidence in all statements made by persons whose interest may be promoted by deception, and I have seriously questioned whether your otherwise excellent paper, was not doing a public injury by soliciting statements from persons relative to their own business under their true signatures. I have also questioned the motives by which you have in some of your jottings been induced to place certain names in such complimentary circumstances. Why not give us the facts omitting the name when not necessarily connected therewith? In gathering statistics through miscellaneous correspondents let each tell what he may know of another, and say nothing of himself. You may perhaps think me censorious and uncharitable towards my fellow men; I only ask to be governed by the same rule which prevails in courts of law. Let no man testify in his own behalf. If he has property to advertise let him do it in the regular way.

Still, feeling the want of information relating to the agriculture of our own state, and your paper being the only source through which I can obtain it, and being rather pleased with the present number, I have concluded to become a subscriber, and have handed the subscription price to your agent.

Yours respectfully, A. A. GARDENER.

Northville, Mich., 1858.

[We cannot agree with our correspondent on the subject of concealing the names of those who make experiment, and are willing that their success or failure should be known, and accounted for. Neither do we think that what we note in our visits to the several portions of the State, would be worth half as much to practical men did we conceal the names of those who raised good stock, or who made improvements. We might say that Mr. Y. or Mr. B., of such a place did his work in such a manner, but we want the benefit of Mr. Y. or Mr. B.'s character as a farmer to indorse our statements, as practical exponents of what we assert. To those who read the FARMER for instruction, it is of much importance that the name of the introducer of improved stock or of improved implements should be known. We are well aware that many in this way get the benefit of advertisements that they do not pay for, but it is a system of skimming we are so used to that we don't mind it now any more than the "old lady's eels."—ED.]

Horticultural Department.

Origin of the American Pomological Society— Its Influence upon Fruit Culture.

Prior to the discovery and settlement of America, the horticultural, as well as agricultural, tastes of Europeans seem to have been in a very crude and uncultivated state; and, from the history of its development, we may fairly infer that much of their present interest in such matters is owing to a reflex influence from their descendants in this country.

The first settlers of our seaboard, on leaving their native land, found no nurseries at hand, from which to draw supplies of fruit trees to plant about their wilderness homes; and, in place of them, they very naturally gathered supplies of the seeds of such fruits as they esteemed most, or could most easily obtain. From these sprang the orchards of the earlier settlers. Their descendants, also too busy with their encroachments upon the wilderness to give much attention to minor matters, obtained their orchards in a similar manner, by means of seeds from these pioneer orchards.

Mainly by this process, the cultivation of fruit has kept pace with the march of emigration westward, until, within the last half-century, the propagation of trees by grafting and budding has become a business, absorbing a large amount of capital, and sending out millions of trees annually, to be planted upon the incipient homesteads of the west.

During the whole of this period, varieties worthy of notice have been accumulating, while the happy adaptation of our climate to the business, has given it additional impetus; and, more recently, the increased facility of intercommunication with Europe has induced the introduction among us of the varieties brought to notice by European pomologists.

Under such a state of affairs, and with no concert of action among growers, it is not surprising that our pomological nomenclature should have fallen into almost inextricable confusion. Up to the commencement of the present century, very little seems to have been written on the subject. Since then the writings of Cox, Thacher, Fessenden, Prince, Floy, Manning, Kenwick, and others, have done much to remedy this state of things. But in their days books were not the common things they now are, and these works were read by comparatively few men; while the mass of the people still clung to their local names, or invented yet others to increase the confusion.

Within the last twenty years, the opening up of the unparalleled fruit region of the North west, the cheapening of books and papers, together with the advent of such popular writers as Downing, Thomas, Barry, and a host of others, have given a tenfold im-

petus to *experimental* Pomology, till at the present time it is no child's play to become acquainted with the rarities as fast as they are paraded before the eager public;—to say nothing of making the acquaintance of older candidates.

To bring order out of this chaos of names, to determine what varieties are no longer worthy of cultivation, to establish rules for the introduction and naming of new ones, and to disseminate a taste for fruit culture throughout the country, is the mission assumed by the American Pomological Society which is to hold its seventh biennial Session at New York, on the fourteenth of September next. A society numbering among its members the most scientific, efficient, and thorough pomologists in the country; and whose labors are in an eminent sense labors of love.

On their tables, at the approaching exhibition, will doubtless be seen, with the highest assurance of correctness, the favorite fruits of the North, and of the South, of the East, and of the West, with their "blushing honors thick upon them," and all oblivious of the bickerings, jealousies, and raids that too often distract and alienate the people of their native regions.

Heretofore Michigan, although confessedly one of the best fruit growing States of the Northwest, has been only occasionally represented, either by delegate or specimens of our productions; and, in consequence, many errors of our nomenclature remain uncorrected, the capacities of our State are to a great extent unappreciated abroad, if not at home; while our pomologists lose one of the most favorable opportunities of becoming practically acquainted with the fruits of other regions.

The questions may well be asked, Are we not standing in our own light by pursuing this course? How much do we suffer, in these respects, by allowing our *commercial* capacity in the way of fruits to be underrated? How many emigrants, seeking locations at the west, for horticultural purposes, pass us by from sheer ignorance of the advantages our State has to offer?

The fact is but imperfectly known, even at home, that in three fourths of the settled portion of our State, the apple trees have suffered but little during the past severe seasons, while throughout Iowa, Illinois, Indiana, and even favored Ohio, in many cases, nearly whole orchards are swept away.

A direct trade is growing up between the lake region and Europe, by way of the St. Lawrence, which will enable us to ship our fruits to foreign markets with safety and dispatch; thus giving us an equal share in the advantages so long held by eastern fruit growers.

If, then, we would not put aside the advantages so temptingly held out to us, and yield the precedence to those of less capacity, but more ambition, I would

say, appoint your delegates; produce and send forward your specimens, and see that they are duly placed upon the tables of the society. Every man who produces a tree, or a bushel of fruit, for sale, has a direct interest in the matter. T. T. LYON.

Standards vs. Rootgrafts.—Looking over the Ground.

EDITOR FARMER, *Dear Sir*:—As Mr. Hathaway has given us, in the May No. what seems to be intended as his valedictory, I must ask the privilege of reviewing the ground, for the purpose of gathering up some scraps of information that have been elicited during the controversy, and drawing some conclusions therefrom.

It will be remembered that I set forth with the position that the tenderness of certain varieties of fruit trees is constitutional, and not necessarily attributable to the mode of propagation: that seedlings, *as a whole*, were as liable to prove tender as were the mass of cultivated varieties: in proof of which I adduced a few cases from my own experience.

Furthermore, I stated that, in this region, at least, trees are usually injured at or near the surface of the ground; and as Mr. H. proposed to work trees within eight or ten inches of the surface, I objected to this as being too low for tender varieties, which would thus be brought within the region of greatest danger, and too high for the seedling stock, should that also prove tender; thus doubling the chances of failure. After urging the danger of getting strong growers upon weak stocks, and "*vice versa*," I proposed to take scions of some variety of known vigor, hardiness, &c.; and rootgraft them, setting them so low as to induce the putting out of roots from the scion; thus securing hardy and vigorous trees upon their own roots, which can be budded, or topgrafted with other varieties, on reaching the height at which we desire to commence a top. By this process we attain a perfect assurance of the hardiness of the stock employed, while we avoid the difficulty of training up the more slender or straggling varieties.

On the other hand, Mr. H. urges that large quantities of rootgrafted trees have been injured, while others have escaped; and adduced many facts, and scraps of correspondence, to prove this, apparently oblivious of the fact that I have never called it in question; but, that I attribute the injury in such cases to the tenderness of the varieties; to the planting of unacclimated trees, or to other causes independent of the mode of propagation; while he dismisses the proposed plan of *double working*, with the single remark that he has come to be suspicious of all complication in such matters; and almost entirely ignores my position that the alleged tenderness arises from constitutional peculiarity, and not from the mode of propagation: a position sustained by my own experience, and also by observation in this,

and other neighborhoods, in the most complete and satisfactory manner.

The facts elicited in the course of this discussion, show a wide difference in the experience of growers in different sections of the State. While in this region, and, (so far as my observation extends,) throughout the timbered portions of the State, the injuries are comparatively slight and mostly confined to the lower portion of the trunk; throughout the prairie region of this State, and also in Wisconsin, Illinois, and Iowa, trees are said to be injured in the tops also, a result which must be attributed to their rich soils, late growths, and bleak winter winds.

As these difficulties are in the main unavoidable, the judicious planter will feel the necessity of palliation. The force of the winds may be broken by means of a belt of evergreens, or other trees planted along the exposed sides of the orchard; or, in a less effectual manner, by high and tight fences; and also by forming the trees with low tops. The late growth may to some extent be prevented by judicious management in cropping and manuring the ground, and by moderate and regular pruning; and last but not least, success may be insured by planting only such varieties as are known to be hardy in the locality.

The main points in this controversy are very happily touched in a communication from James Wake-man to Emery's Journal of Agriculture of June 10th, (page 379) which could hardly have been more to the point had it been written as a part of it; and which I would request you to copy, if you do not feel that you have already given the subject too much space.

T. T. LYON.

Pear Cultivation.

We have just received from the publisher, A. O. Moore, a neat volume containing nearly 300 pages, entitled "*PEAR CULTURE, A manual for the propagation, planting, cultivation and management of the pear tree, with descriptions and illustrations of the most productive of the finer varieties, and selection of kinds most profitably grown for market*, by THOS. W. FIELD." This work is illustrated with many engravings of choice fruits, and also of the methods of grafting, budding, and general cultivation of the Pear. The style of the work is that of a plain, unpretending essay, that can be referred to any time for all ordinary instruction as to the treatment of this noble fruit. The publication is a very timely one, for there was beginning to prevail an impression that the pear was a production which could not be grown profitably, or with any ordinary culture, which we are pleased to see that Mr. Field completely ignores as so incorrect that it is unworthy of notice. Such a work was much needed and it seems to have been performed by one who was very competent to do it in a most satisfactory manner. No fruit that is

grown at the present day will pay so well as pears, but no man need expect that he will get a crop from an orchard that is to be used for every other crop, such as wheat, corn, oats, &c., whilst the trees are growing, and need the whole use of the soil on which they stand. As some are preparing to plant, we quote what this work says on

"SOILS FOR PEARS."

"It is somewhat mortifying to the pomologist after twenty years of careful study of the laws which govern the growth and fruiting of trees, to feel constrained to acknowledge, that not only what he has learned from others, but much of what he has gathered from his own experience, is to be distrusted—perhaps unlearned.

In nothing is he likely to be more disappointed than in the soils which analogy and theory would induce him to point out as superior. So many influences and conditions affect the results of horticultural effort, that disappointment often follows the selection of what appear the finest soils. The Newtown Pippin, on the soil of Long Island, where it originated, refuses to yield the exquisite juices and rare perfumes which distinguish the king of apples; and from the same island which once sent forth sloop-loads of the rarest Vergalien Pears, scarcely a bushel of perfect fruit of that variety has been gathered in one season for the last fifteen years. Neither the richest soil, nor the most careful cultivation, any longer produce good fruit of these varieties; while on the rugged farms along the Hudson, the Newtown Pippin preserves its superiority with scarcely an attempt at cultivation bestowed upon it; and through the central and northern counties of New York, the Vergalien continues to produce its unrivalled fruit. Most of the other varieties of Pear are produced on Long Island and in New Jersey in great excellence and abundance. Varieties of pears are pronounced excellent in the vicinity of Boston, which are worthless when raised in other localities with equal care in cultivation. These anomalies prevent us from declaring with certainty upon the fitness of any soil for all varieties of pears, when that particular locality and soil have not been tested by experiment. No prudent man will, therefore, plant a very large number of trees, of varieties which have not been proved in his neighborhood; at least, not without having made careful inquiry regarding those that have succeeded or failed.

Still, general rules that should govern in the choice of soils may be given. No soil, however rich, that allows water to remain on its surface more than a day after it has fallen, or to rise in holes dug not more than four feet deep, is fit for plantations of the Pear, or, indeed, of any other fruit tree. And no light, thin soil, which is not susceptible of deepening, can be relied on.

The soil for the Pear must be dry, and either deep, or capable from the nature of its subsoil of deepening without destroying its excellence, and of a looseness of texture sufficient to allow the free extension of the tender rootlets.

A peaty or alluvial soil, or one too rich in vegetable mould, may induce a luxuriant and beautiful growth in appearance, the succulent shoots of which a rigorous winter would certainly blight. A free loam having a preponderance of sand, without being light, is preferable, as it is easily worked, at times when a clayey soil would be nearly a bed of mortar.

With proper manuring the first would produce a stocky, well ripened, but comparatively short growth, while the latter, if in good condition, would induce one more vigorous but frequently unripened.

A noticeable instance of this difference is seen in the fact, that the winter blight of the Pear has never been known on the rich, but light soils of New Jersey and Long Island, which seem peculiarly adapted to the growth, productiveness, and longevity of the Pear: while the winter of 1845 destroyed many thousands of pear trees on the strong soils of the counties of Central New York. In the neighborhood of Syracuse, this was especially remarkable.

Nothing can be more fatal to the hopes of the pear grower than the selection of his trees from an alluvial flat. Blight at some period of their existence is sure to manifest itself in a great number of them. Free soils, however, it must be granted, are subject to balancing evils, in affording shelter to innumerable tribes of insect depredators, in fostering the production of equally innumerable varieties of weeds, and in more readily parting with moisture and manure.

A more nearly perfect soil as a base, for the cultivation of the Pear, is a somewhat heavy loam, composed of three-fourths of coarsely granulated sand, fifteen to twenty per cent of clay, and the remainder of vegetable matter. This should rest upon a subsoil of sand and clay, extending to the depth of three or four feet. A bed of gravel should underlie the whole, thus affording perfect under-drainage. It would be well for the planter, before engaging largely in the business, to ascertain the longevity and productiveness of such pear trees as are growing in his neighborhood. Many of the old Dutch residences of Brooklyn, erected long before the Revolution, bearing evidence of the military violence of that period, are surrounded by trees older than themselves—trees that have outlived two or three generations of houses, each of which may have seen as many generations of men pass away. Mr. Downing certainly made a great mistake when, in writing a description of the soils suitable for the Pear, he pronounced a sandy loam unfitted for the permanent growth of the tree. Two or three hours' ride through the western end of Long Island would have convinced him that there were, in that locality, more pear trees, from fifty to one hundred years old, than in all the rest of the United States. The number of pear trees, more than forty years old, in King's and Queen's counties alone, must be greater than fifty thousand. At Greenpoint, L. I., now the Seventeenth Ward of Brooklyn, may be seen an orchard of more than one hundred pear trees, which the oldest residents remember to have been of full size, and in full bearing, in their boyhood. Three of these trees I have found to measure respectively nine feet, ten and one-half, and eleven feet in circumference. These last cannot have been in existence less than one hundred and fifty years.

These were the offspring of seed planted by the Dutch and Huguenot exiles, about the time of the settlement of the town in 1648; and are certainly good evidence of the longevity of the Pear, on comparatively light soils. I do not assert, however, that trees planted on thin, sandy soils, especially such as overlie an impervious, or a poisonous subsoil, would not be liable to blight. On such soils, the roots, compelled to keep near the surface, are exposed to the sudden and extreme heats of summer, by which their sap is so highly heated as to destroy the more

newly-formed and tender spongioles and sap vessels. In such case the roots are said to be scalded; because, at their shallow position, they are unable to obtain sufficient moisture for the supply of the leaves, which, by their abundant evaporation, lower the temperature of the sap—vapor being so perfect a conductor of heat. The frozen sap blight has not, within the memory of man, been known to visit the localities above mentioned, except under the circumstances noted relating to subsoils.

The State Horticultural Society.

This Association held its first exhibition in a large and commodious store on Woodward Avenue, Detroit. The exhibition, taking into consideration the season, the short notice, and the want of time to give exhibitors an opportunity to prepare, was very good, as will be seen by the report of its proceedings, which are given below. What was lacking, to render the exhibition entirely successful, was want of interest on the part of the citizens of Detroit. With the exception of a very few, there does not seem to be the least taste for ornamental or suburban gardening amongst them. The visitors to the exhibition were few, and little or no intelligent criticism was elicited. No inquiry was made as to the new plants and varieties of fruit which were shown, and the encouragement held out to the Society by the first city in the State, amounted to nothing. In any place in the interior, such an exhibition would have called out a far greater show of favor. It is true that due allowance must be made for the fact that the notices given were rather short, and many who would have attended did not know that such an exhibition was being made. But it is equally true that many who were waited upon by the Secretary, and promised aid and countenance, afforded neither. Still it must be admitted that a beginning has been made, and we hope to see the members keep up the organization. It will grow, with the aid of some nursery attention, and we hope to see it yield flowers and fruits of the rarest and choicest kinds.

Report of the Secretary and of the Committees.

During the exhibition of the Michigan State Horticultural Society, held in the City of Detroit, on the 30th of June and 1st of July, at a meeting of the members held for that and other purposes, the Secretary presented a copy of the revised edition of the *Fruits and Fruit Trees of America*, contributed by Mr. Charles Downing, of Newburgh, N. Y., for the use of the Society; whereupon the following resolution was adopted, viz.:

Resolved, That the Secretary be requested to convey to Mr. Charles Downing, the thanks of this Association, for a copy of the recent edition of the revised work on the *Fruits and Fruit Trees of America*, kindly contributed for the benefit of the Society.

The Committee on Vegetables submitted the following report:

Best specimen pie-plant, S. O. Knapp, Jackson; Wisconsin seedling. Second best do, Hubbard & Davis, Detroit; seedling without name.

Lot Kohl Babi, John Stephens, Detroit; only sample, very choice.

Collection of early vegetables, (including peas, beets, cabbages and potatoes,) from Geo. Taylor of Kalamazoo, is a very choice production, much in advance of the season, and worthy of particular notice. The potatoes especially, are very fine, and entitle the producer to especial commendation.

Display of early potatoes from O. C. Thompson, Detroit; grown entirely in the open air, much in advance of anything in the vicinity of Detroit.

T. F. HINCHMAN,
O. C. THOMPSON,
PHILO PARSONS, } Committee on
Vegetables.

The Committee on Fruits would report, that all the fruits which were exhibited were either cherries or strawberries. A considerable variety, in name, of the former was furnished by different contributors, but generally they were not sufficiently ripe; nor did they appear to have attained their ordinary excellence and beauty, appropriate to this period of the year. The late, cold spring, and the long continued rains of May and early June, have no doubt contributed to prevent the healthful and perfect development of this very desirable and delightful fruit.

We have thought that our climate is less favorable to the healthful growth of the cherry and the perfection of its fruit, than to that of almost any other in the whole circle of summer fruits.

The strawberry too, this season, has been retarded in its ripening, but we have seen some specimens of very superior and abundant crops of this delicious fruit, notwithstanding the backward spring, and the cold and frequent rains that fell during the month of May.

Among the varieties offered at this exhibition, two particularly deserve attention; and to them we accord the meed of praise for first rate specimens.

The one is a plate of strawberries presented by Mr. G. W. Corey, of Detroit, who says that the plants were obtained from a friend, and that the variety is of South American origin. The size, flavor, and exceeding luxuriance and fertility of the plant, according to Mr. C., rank it among the first-rate varieties for cultivation. It is, perhaps, somewhat larger, but in other respects equal to Longworth's Prolific, as its character has been described by the grower.

Messrs. Hubbard & Davis presented a dish of very superb McAvoy's Superior, a very large, fine looking fruit, but by no means equal in flavor with either of those just named and described.

S. O. KNAPP,
R. S. GAGE,
GEO. DUFFIELD, } Committee.
on Fruits.

The committee seem to have overlooked a collection of strawberries shown by Mrs. John Ford, embracing many of the newer sorts, as Genesee, Hooker and others. Also, a collection by Wm. Adair, embracing several foreign novelties. Some of the above were well grown, and were a valuable addition to the exhibition, as furnishing a means of comparison between them and the more common kinds.

O. C. Thompson of Detroit, also contributed a basket of very superior White Alpines, which were brought in after the committee had made their examinations, and thus escaped their attention. [Sec.]

The Committee on Flowers offer the following report:

Hiram Walker, Detroit, (amateur,) contributed cut flowers, consisting of moss roses, pinks, peonies, honeysuckles, pansies, &c.

Hubbard & Davis, Detroit, (professional,) a fine display of assorted roses; a splendid display of sweet-williams, in fine assortment, embracing in color, from the gayest red down to the clearest white, variegated, &c.; snapdragons, peonies, feverfew, fox-glove, phlox, carnations, picotees, queen-of-the-meadow, rockets and lark-spurs in variety; a fine agapanthus, in a pot, and twelve varieties of verbenas in pots, and last though not least, a splendid, broad, rustic, mossed mound of flowers, consisting of petunias, pelargoniums, ivy, scarlet geraniums, heliotrope, lantanas, &c. Altogether, their collection was very good.

J. T. Wilson, Jackson, (professional) single specimen blooms of twenty varieties of verbenas, fifteen of roses, with carnations, honey-suckles, &c.

John Ford, Detroit, (professional,) a very large and fine display of green-house plants, consisting of fuschias, scarlet, rose and other geraniums, pelargonius, lantanas, heliotropes, musk, feverfew, &c. The splendid fuschia, (Prince Albert,) the committee think worthy of especial notice.

Mary Ford contributed a very fine round boquet.

Wm. Adair, Detroit, (professional,) a lot of green house plants, consisting of pelargoniums, fuschias, cuphias, rueillia formosa, sweet scented verberna, &c.; a white China rose, and the beautiful and modest celse rose, all in pots; also, three nice round boquets.

John Stevens, Esq., Detroit, (amateur,) a fine collection of green-house plants, very fine and stocky, evincing skillful training, highly creditable to the gardener, (Wm. Long-staff,) consisting of heavy stocks, in pots, of feverfew, rose and scarlet geraniums, pelargoniums, cissus discolor, fuschias, acacia, loyanta, heliotrope, cupheas, &c. Among the fuschias, were two worthy of especial remark, viz: Banks' Glory and Pearl of England. They were brilliant gems, worthy of praise.

Mrs. E. C. Walker, Detroit, (amateur,) one beautiful flat boquet, three varieties moss rose, one unique rose, one very fine agapanthus in bloom.

P. Deanoyers, Esq., Detroit, (amateur,) two boquets roses and other flowers.

O. C. Thompson, Esq., Detroit, (amateur,) fine blooms of white lily.

Geo. Taylor, Esq., Kalamazoo, (amateur,) twenty named varieties of the new and finer kinds of roses, a very beautiful collection; a fine assortment of snap-dragons; several varieties imperial pinks; two varieties delphiniums; four varieties double holly hocks; one of phlox, feverfew, &c.

Philo Parsons, Detroit, (amateur,) three fine blooms dahlias, much in advance of the season.

J. T. WILSON,
G. V. N. LOTHROP, } Committee
F. RAYMOND, } on Flowers.
T. T. LYON, Secretary.

Horticultural Notes.

Novelties.—The London Gardeners Chronicle notices among the novelties displayed at the late unsurpassed exhibition of the London Horticultural Society at its gardens at Chiswick, the following, some of which are hardy, and worthy of the attention of amateurs here.

"Novelties were sparingly exhibited; the most remarkable were some fine *Nepenthes*, *Olea ilicifolia*, a hardy ever green shrub. *Thujiopsis dolabrata*, the rarest and perhaps the finest of all hardy Conifers; and a very striking golden Salpiglotis from the Messrs. Veitch; two hardy ever green Berberries, *Japonica* and *Beallii* from Japan; some plants of the *Torreya grandis*.

A new greenhouse plant entitled *Clianthus Diam-pieri*, is attracting much attention in London. It has been grown by the Messrs. Veitch who have had it in bloom the present year. The original plant belongs to New Zealand.

The *Paulownia imperialis* has blossomed in England the present year, and is considered a magnificent ornamental tree. We note that Mr. J. Stephens of Detroit has two of these trees in his front yard. One of them however was killed to the ground last winter but is sending up a new and strong shoot the present summer.

At a trial of hand mowing machines near London, Eng., under the auspices of a committee of the Horticultural Society, the first premium was awarded to Green's Machine, as the best, for cutting within a given time, the greatest number of square feet, quality of work, construction, and lightness of draft.

Wilson's Albany Strawberry.—We notice that Wilson's Albany Strawberry is very highly commended for several important qualities, having now been tried in a great many localities. In the first place they have proved more productive; 2d they have been more uniform in size, and at the same time were large; and 3d they were firmer in

flesh, and therefore more suitable for a market fruit. Cultivators in Philadelphia, Ohio and Western New York all give the same testimony.

Plant Strawberries Now!—Those who desire to have productive beds of strawberries should immediately set about the formation of their beds, as strawberry plants if set out now will give a good yield next season. The bed should be located on rich mellow and somewhat sandy loam, but as every grower cannot have his choice, the bed should be made mellow by digging it as deep as possible, and whilst doing so, every root of grass and weeds should be carefully picked up, and carried off. Then give the bed a good dressing of a bushel of leached ashes, and five or six well heaped barrows full of old manure to every every square rod of ground. If a few barrows of swamp muck can be added so much the better. The whole should be well forked in, and the surface made level. Having got the bed ready, the plants should be selected. There is no question, that a bed of good varieties is very imperfect, without a fair proportion of Hovey's Seedling. Burr's New Pine is also a good variety to be planted with the Hovey, which is a pistillate variety, and cannot fruit well or to perfection without a staminate sort. Hovey himself uses the Boston Pine, which is a good fruit. The new variety, called Wilson's Albany, is certainly worthy of a trial, if we may trust to the judgment of many growers of this berry, who may be relied upon. There are also several of Prince's varieties, which, are good kinds, but which are little known off the sandy soils of Long Island, and which might be found adapted to our western culture. None of the much vaunted English sorts equal our own varieties. McAvoy's Superior is a sort that is celebrated for producing large fruit, and so does Burr's Ohio Mammoth; but neither are very prolific.

The plants, whatever they may be should be set out in rows, fully twenty-four inches apart, and the plants may be twelve inches from each other in the row. This will afford ample room to keep them clean, and well hoed. Of course every plant should be strong and healthy, when set out, and there may be allowed several plants in each cluster, but keep each cluster distinct and separate from the other. Allow no runners to form and set in the rows, but cut them all off with the sharpest of hoes if fruit is required. If, on the contrary, it is desirable to increase the stock of plants without regard to fruit, let the runners grow, there will be some good plants from them early in the spring; but the parent plant will not grow as good fruit. By the way, has any amateur or professional man been able to ascertain the real merits of Peabody's Seedling?—Jonathan Hautboy.

A few Queries about an Orchard.—I wish to ask if it would be injurious to sow oats in an orchard, and "hog them down"? that is, turn in hogs and feed them on the ground, to be followed the next season in the same manner, with the same crop. Will not the hogs eat the fallen apples? Will not the straw mulch the trees, and keep the ground moist? Will the straw serve as a shelter for mice? or will the hogs mix it with the surface soil so as not to make a harbor for mice? The orchard which I wish to sow to oats if now in corn, the land is well manured, with barnyard manure, and plowed deep (10 inches not guessed at but actually measured;) I thought I was plowing 12 or 13 inches, beam deep, but 10 was all. Guess work is not to be depended upon.—Tyro.

Note that W. R. Prince in his catalogue of strawberries, is strongly in favor of the cultivation of the pistillate varieties, with staminate or hermaphrodite plants enough to fertilize them.

The Household.

"She looketh well to the ways of her household, and eateth not the bread of idleness."—Proverbs.

EDITED BY MRS. L. B. ADAMS.

Alice.

Blow soft ye gentle summer winds
Round the dear home where Alice dwells;
Waft to her songs of happy birds,
And odors from sweet lily bells.
Fan the pale roses on her cheeks
To rosier bloom each coming day,
Kiss her young lips and forehead fair,
And through her clustering ringlets play.

She is the one sweet bud of hope
To bloom upon the household tree;
Deal gently with her, winds of heaven,
Unfold the blossom tenderly,
May no rude storm or fatal blight
Reach the dear home where Alice dwells
Amid the songs of happy birds
And fragrance from the lily bells.

The Farmer's Boy.

BY A SUBSCRIBER.

The sun went down behind the hill, across the dreary moor
As wearily a young boy came up to a farmer's door,—

"Pray tell me, sir, if one like me with you can get employ,
To plow and sow, to reap and mow, and be a farmer's boy?"

My father's dead; my mother poor, with children young and small,
Five helpless little ones, and I the eldest of them all.

Though slight I seem, I fear no work, and it will give me joy.
To plow and sow, to reap and mow, and be a farmer's boy.

But if you cannot give me work, O till this night be past
Pray shelter me beneath your roof from this cold winter blast.
At break of day I'll trudge along, elsewhere to seek employ,
To plow and sow, to reap and mow, and be a farmer's boy?"

The farmer said, "I'll try the lad, nor fear I shall him seek;
"O yes!" his gentle daughter cried, while tears run down her cheek;

"For those who'll work 'tis hard to wait, and wander for employ,
To plow and sow, and reap and mow, and be a farmer's boy."

In time the boy became a man, the good old farmer died,
And left him owner of the farm, with his daughter for his bride.
Now to a thriving farmer grown, he often thinks with joy
Of the lucky day he came that way to be a farmer's boy!

In the Country.

A week's diversion in the country is not such an unusual thing now-a-days, that every one who is fortunate enough to get whirled away on the cars, jolted off in a wagon, or bounced along the plank highway in a stage from the city to the "rural districts," need feel in duty bound to make a circumstantial account of all the sensations experienced during the transition; nor is it such an astonishing thing to meet with civility outside the city limits that the petty tourist need chronicle every smile and bow and friendly word, and parade them in print to prove that "country folks" are human beings, and not altogether barbarians at that. Yet, when one, long confined to the walls and walks and ways of city life, does get out into the open

world, does see forests growing as nature planted them, hear the music of birds without the accompaniment of their prison wires, breathe the sweet wind as it comes over acres of orchards and clover bloom, tread on the real earth, drink water from a well instead of a pump log, and enjoy the full, free hospitality of such a community of farmers as those around Northville and the vicinity of Plymouth, one cannot well help wishing to tell of it, if for no other purpose, at least for the privilege of expressing gratitude, firstly that God has made a world of so much goodness and beauty, and secondly that some generous friends took it into their heads to give us an opportunity to share with them, in such a place, one whole week overflowing with the bloom and glory of June!

Of the glory, to speak in plain prose, there was rather an excess, as the whole week was one of burning, cloudless sunshine, pouring down such an intense heat as no breeze could mitigate or forest shadows cool; but the determination of our friends to make it a season of enjoyment was fully equal to the occasion. It is true they were in the midst of a "hurrying season;" the late-planted corn was calling for the cultivator to exterminate the rampant armies of native weeds and grasses,—the latter already shaking their long blades in triumph over the anticipated ears of the puny intruders. The sheep were bleating to be shorn, and clover blooms heavy with fragrance, nodding a welcome to the mower's scythe. Thus, as the farmers said, the sheep shears rang against the cultivator and the scythe was ready to drop on the handle of the shears. But they proved the truth of the very significant adage, that "where there's a will there's a way;" and having willed to have leisure for visiting in the midst of their hurry, they had it.

We who turn day into night, and night into day, go to bed at midnight and rise when the sun has performed two thirds of his forenoon journey, can have no idea of the advantages gained, especially in this hot weather, by going to rest at nine and rising with the dawn. Our country friends were wise in this matter; they cultivated good habits and their crops together in the cool of the morning. By nine o'clock a good half day's work was done, the work horse was freed from the harness, and fresh ones were brought up to the carriage that was to convey us to some neighboring farm house on an "all day visit," or for a succession of calls, or a fishing excursion to Walled Lake. Never, in the space of so short a time did we visit so many charming places, or become acquainted with so many pleasant people. We dropped into farmer's houses, unexpected and unannounced, at all hours of the day, seasonable and unseasonable, and everywhere met the most kindly welcome and the readiest hospitality.

The region of country over which our visits extended is a part of the oldest settled in Michigan. The farms, originally heavy timbered lands, are now

thoroughly subdued and most of them highly cultivated by their intelligent and progressive owners. But we are not going to trespass on the Editor's grounds, or draw down upon our head the displeasure of the correspondent in another department of the present number, by specifying what improvements we saw, or mentioning the names of those who have made them.

One remark, however, we will make, as it is of very general application to all the homes we visited, and strictly within our own province in the FARMER: and that is, that home improvements, real household comforts and conveniences, seemed to keep pace with doors with the thrift and progression observable without. This is proof enough, if any were needed, that intelligence on the part of the farmer is of as much advantage to his family as to his stock and crops, and therefore that it is for every woman's interest to encourage, and, if she can, aid her husband in the pursuit of agricultural knowledge. However, men, whether ignorant or intelligent, are far from being responsible for all the discomforts of ill-appointed households, and we would not have them imagine we think so, any more than that we give them credit for all the good management, the taste and refinement so characteristic of the many pleasant homes of Northville and its vicinity. But we do not intend giving a homily on "duty" to either party just now: especially as we cannot call up any particular instance where it seems needed! Too many pleasant memories of kindly greetings and welcomes into happy homes are crowded into that week's chapter of life to leave room for any other feeling than that of gratitude to all who contributed in any way to our enjoyment. We hope all will consider themselves included in this voluntary vote of thanks.

Domestic Economy.

The Household is indebted to Mrs. C. W. Greene, of Farmington, for the valuable recipes given in this number of the FARMER.

We also give below such extracts as our room will permit, from the very practical essay on Domestic Economy written by Mrs. Greene, and to which was awarded the highest premium offered by the State Agricultural Society for 1857:

"Economy means household law—and applies to the government, and regulation of the financial concerns of a family. It is commonly used in the sense of frugality, and has reference to the acquisition of wealth.

Wealth consists of anything which is of value in providing for our wants, or administering to our comforts. Three things are essential to its accumulation, viz: knowledge, labor, and economy; knowledge, to make an intelligent application of labor,—labor, to act as the direct agent in its production,—and economy, to make a judicious disposition of it when acquired.

Undoubtedly, most people understand these terms and their application, but it by no means follows that

they are practically understood or applied. A failure to accumulate wealth is generally to be attributed to a deficiency in one or more of these essentials. Some possessing the requisite knowledge, do not combine practice with theory; others, through ignorance, make a misapplication of labor; and others still, fail for want of economy.

Business ought to be planned with reference to the amount of labor requisite to accomplish it, and the probability of being able to command it when needed. People are sometimes induced through false notions of economy, to attempt too much, without sufficient help to carry out their undertakings, and are thus forced to overtask themselves, frequently at the risk of health and life, or at best, the sacrifice of individual and social happiness. This is wrong, and generally unnecessary,—nor is attended with pecuniary advantage,—when too much is undertaken, something is sure to be neglected, and in reaching to secure many important things, others, equally so, are lost sight of.

But there is one point which cannot be too strongly urged, and that is, the propriety of developing the physical ability of young members of a family, and turning it to practical account. Children at a very early period, should be encouraged, and, if necessary, mildly, but firmly, compelled to direct their exercises a portion of the time, in a useful direction. I wish to place particular stress on this point, because it is a common error to repulse their first inexperienced and awkward attempts to render assistance, with harshness and ridicule, which is not only highly injudicious, but absolute cruelty to the sensitive feelings of childhood, and rare indeed must be that disposition, which does not become sullen and indolent under such treatment.

A share of labor suited to their capabilities, should be regularly allotted to them, from an almost infantile age. It is better to begin too early than too late, as it is less difficult to form industrious habits, at a period when all habits are unconfirmed, than eradicate indolent ones that have been fostered by time.

House keeping, by which is meant everything embodied in the domestic system, is the natural avocation of woman, the art of all arts she should thoroughly understand. This knowledge can only be acquired, as in the case of any art, by application of personal labor to the various details which are essential to the comfort and prosperity of every family. General rules and recipes may aid, but cannot supply the place of experience;—as well might a man unacquainted with navigation think to guide a ship aright, as for a woman, ignorant of domestic arts and economy, to expect to guide, successfully, the welfare of a household;—both are liable, in nautical parlance, to find themselves among the breakers.

It is not the intention to speak disparagingly of that part of education which is designed to develop and elevate the intellect, nor to undervalue those accomplishments which have a tendency to refine and polish, but to show the insufficiency of either, exclusively, to prepare the young for the great necessities of life.

That is the most perfect system, which happily combines moral, intellectual and physical culture—not overlooking the fact that man possesses a dual nature—having animal as well as intellectual needs, and that it is of the highest importance, that these elements of his nature should be developed and elevated harmoniously;—which should take precedence,

is indicated by the fact, that labor was the first great ordinance of Heaven;—and that nature's laws compel, first, the supply of the physical wants.

The wisdom of the Creator, perfectly comprehending what conditions were best adapted to the higher progression of the race, permitted those disadvantages which, by making constant demand on the energies of man, and thus keeping in exercise his faculties, should prevent that retrograde into barbarism, which is the inevitable result of inactivity. It is manifestly our duty to assist the designs of Providence in our behalf,—and to elevate Labor to its own proper dignity, as the guardian virtue of all the virtues. To do this we are not only to give our personal influence—but a reasonable portion of *time and money*, to the furtherance of such movements as have for their object the encouragement of any branch of productive industry. Much honor is due our Agricultural Societies, for having exerted an extensive, and highly beneficial influence in this direction,—and for originating a scheme, in the founding of an Agricultural College, which designs to aid in carrying out a thoroughly practical system of education, and from which, under favorable circumstances, we may anticipate the most happy results.

Possessing, as we do, an immense and fertile territory, comprising all earthly climates, and unsurpassed in natural wealth by any portion of the Globe—under free institutions—where plenty may ever be the boon of honest industry—and with the example before us of an ancestry whereof we are justly proud—what ought we to expect? What may we not expect if, as individuals, and as members of the body politic, we accomplish the task of reforming those abuses, the disastrous effects of which, from time to time in our national career, have so seriously impeded our progress?

THE MAGNOLIA.—Through the kindness of E. N. Wilcox, Esq., of this city, we had the pleasure of seeing during the past month, the beautiful bloom of the Magnolia Grandiflora belonging to him and kept in a green house near town. The tree is about fifteen years old, and this was its first flower; it was a splendid blossom and worth going miles to see. The gardener who attends it told us that he had been among the Magnolia groves of the South, and never saw a more perfect bloom, or one with richer fragrance than this, and he thinks the tree will show an abundance of flowers another year. The petals were eleven in number, six without and five within, making the flower semi-double, of a pure, waxen whiteness, and, when fully expanded, showed a disc of about ten inches in diameter. Those who have never seen the Magnolia in bloom will give themselves a pleasure by remembering, when the season comes round again, if they are in the city, to call at Puigh's gardens (formerly Mixer's) and inhale the delicious fragrance of this beautiful Southern flower.

For Housekeepers.

WASHING RECIPE.—Procure at the soap factory four lbs. Soda Ash,* one lb. unslacked lime, dissolve in five gallons of water—bring to the boiling point; settle, skim, and bottle it. Put soiled white clothes in weak suds to soak the night before washday. Mix

a tea-cup full of washing-fluid with a half pint of soft soap, (or adapt hard soap by melting it with the fluid) and put in the water in which the clothes are to be boiled. When the water boils put the clothes in and boil twenty minutes, they are then to be taken out, rubbed, and rinsed in two waters. The dirt is easily freed with little or no additional soap. This prepared soap is equally good for washing calicoes, and flannels, as it strengthens rather than fades colors, and injures no fabric. Some may object to putting clothes in boiling water, but an experiment will convince them that the rule is "all right." Clothes washed with this fluid will look as white as if grass-bleached, which fact will recommend it to those who live where grass is inaccessible.

In connection with the subject of washing, I will mention another item which many may know already. To remove tea and coffee stains from table linen.—Before putting into suds pour on clear boiling water, let it remain a few minutes, wring and wash as usual.

RICE PUDDING WITHOUT EGGS.—Many people think eggs essential to a rice pudding. This is a mistake. Rice requires two hours to bake, eggs but a few minutes, the result of cooking eggs two hours is whey. This is the way to make a good baked rice pudding. For a two-quart basin, one tea-cup-full of rice; put on a little more than enough water to cover it, keep it luke-warm for an hour or two, pour off the water which is not absorbed, fill the basin with milk, sweeten, add a very little salt, and nutmeg. In the early stages of baking stir the rice thoroughly from the bottom of the dish two or three times. Bake two hours.

JUMBLES.—Four eggs, three tea-cups of sugar, one of butter, one of sour cream, one tea-spoon-full of saleratus, nutmeg or caraway seed, beat well, mix in a light dough, bake in a very quick oven. They improve with age.

MRS. C. W. GREENE.

Miscellaneous Enigma.

I am composed of 28 letters.

My 15, 8, 24, 10, 6, 21, 11, is a city in Michigan.

My 16, 13, 10, 19, 2, 23, is what most farmers have, and all should have.

My 20, 12, 5, 3, 11, is a kind of grain.

My 18, 12, 21, 25 is one of the United States.

My 26, 17, 10, 25, 5, is a county in Michigan.

My 1, 5, 9, 4, 12, is a kind of fruit.

My 8, 22, 23, 8, 14, 27, 16, is a village and county in Michigan.

My whole is what we should all try to promote.

R. S. BROWNELL.

Tyrene.

Answer to Riddle in June No.—ROBIN. Answered by J. R. Norton, Smyrna; M. H. L. Niles; Melvin Williams, Kalamazoo; George C. Woodman, Bath.

Answer to Miscellaneous Enigmas in July.—DETROIT DAILY TRIBUNE, and GENERAL BENEDICT ARNOLD. Answered by Adeliza J. Barret, Highland; M. H. L. Niles; Kate Richman, Saginaw City; Juliette Canon, Washington; Ellen, of White Lake; Melvin Williams, Kalamazoo.

M. H. L., of Niles has omitted several letters in his enigma, consequently it goes under the table. Juliette sends an enigma, but forgets to send the answer with it.

We have been out of town during the past month, and some of the letters with answers to enigmas may have been mislaid, therefore our young friends must not think we willfully neglect them if their names do not all appear.

MICHIGAN FARMER.

ROBERT F. JOHNSTONE, EDITOR.

DETROIT, AUGUST, 1858.

State Fairs for 1858.

Connecticut, Hartford, October 12, 13, 14, 15.
 Illinois, Centralia, September 14, 15, 16, 17, 18.
 Indiana Indianapolis, October 4, 5, 6, 7, 8, 9.
 Iowa, Oscaloosa, September 28, 29, 30, and Oct. 1.
 Kentucky, Louisville, September 28, 29, 30, and Oct. 1, 2.
 Missouri, St. Louis, September, 6, 7, 8, 6, 10.
 New Jersey, Trenton, September, 15, 16, 17.
 New Hampshire, Dover, October, 6, 7, 8.
 New York, at Syracuse, October, 6, 7, 8.
 Ohio, Sandusky, September 14, 15, 16, 17.
 Pennsylvania, Pittsburgh, September, 29, 29, 30, 31, and Oct. 1.
 Rhode Island, Providence, September, 14, 16, 17, 18.
 United States, Richmond, Va., October, 25, 26, 27, 28, 29, 30.
 Vermont, Burlington, September 14, 15, 16, 17.
 Wisconsin, Madison, October, 4, 5, 6, 7.

County Fairs.

Clinton, St. Johns, Oct. 13, 14, J. C. Brunson, Secretary.
 St. Joseph, Centreville, Sept. 29, 30, Harvey Cady, do
 Eaton, Charlotte, Sept. 18, 29, 30, John Morris, do
 Genesee, Flint, Oct. 6 and 7, F. H. Rankin, do
 Lenawee, Adrian, Oct. 6 and 7, Andrew Howell, do
 Northern Lenawee, Tecumseh, Sept. 16, B. L. Baxter, do
 Berrien, Niles, Oct. 6 and 7, R. W. London, do
 Jackson, Jackson, Oct. 6, 7, and 8, E. J. Connable, do
 Ottawa, Eastmanville, Sept. 22 and 23, Benj. Smith, do
 Barry, Hastings, Oct. 13, 14, R. B. Wightman, do
 Kent, Grand Rapids, Oct. 5, 6, 7, E. M. Ball, do
 Calhoun, Mar. hall, Oct. 5, 6, and 7, E. H. Lawrence, do
 Branch, Coldwater, Oct. 6, 7 and 8, J. G. Parkhurst, do

Michigan State Agricultural Society.

*Proceedings of Executive Committee,
 July 19th and 20th, 1858.*

In pursuance of a call issued by the President for a special meeting of the Executive Committee of the Michigan State Agricultural Society to be held at the city of Detroit on the 19th of July, the following members were present:

C. Dickey, President, Benjamin Follett, Treasurer, E. N. Wilcox, C. W. Greene, H. G. Wells, Horace Welch, J. S. Tibbits, J. J. Newell, J. B. Crippen and A. N. Hart.

On motion of Mr. Crippen, B. Follett, Esq., was appointed Secretary, *pro tem*. Mr. Follett tendered the resignation of J. P. C. Emmons, Esq., as Secretary of the Society, which was accepted by the Committee.

On motion of Mr. Wilcox,
Resolved, That a committee of three be appointed to recommend the name of some proper person to fill the office of Secretary for the remainder of the year.

The chair appointed as such committee Mr. Wilcox, Mr. Hart and Mr. Crippen, who reported the name of R. F. Johnstone, Editor of the MICHIGAN FARMER, as a fit person to fill the vacancy caused by the resignation of Mr. Emmons.

The report was accepted, and adopted, and Mr. Johnstone was appointed Secretary.

M. Crippen offered the following resolution:

Resolved, That this Committee are of the opinion that the interests of the State Society require that its Sections for such year, and we will expect said duty to be retary for any year should prepare for publication its trans-
 permed by any person accepting the office for this year.
 Adopted.

The Treasurer made verbal report, which was accepted by the committee.

In this report, the Treasurer stated that having received a short time previously from the State Treasurer, the sum of two thousand dollars being the amount appropriated by law to aid the Society for the present year, he had immediately, with the assistance of a clerk, commenced paying out the awards by the society, in the order in which they had been entered in the book of warrants by the late Secretary, J. C. Holmes, Esq.; and that up to the date of this meeting he had paid out about \$1500; and that the remainder would be paid out as soon as the business could be done. The warrants had been issued without the signature of the Secretary, but these were retained, in his possession. His action in the premises was submitted to the committee.

The following resolution was offered and adopted:

Resolved, That the action of the Treasurer be an is hereby approved, and that the Secretary is hereby directed to sign the warrants remaining unpaid.

Mr. Wilcox made a statement of the propositions submitted on the part of the citizens of Detroit, with regard to the grounds and buildings suitable for the accommodation of the State Fair. There had already been subscribed in various sums, about \$1700 and he had had three several offers of grounds, on various terms, as follows:

1. The grounds occupied by the Society for the past two years, with the fences, buildings, and fixtures thereon, could be had on the very reasonable terms of \$500, and if accepted would certainly save the Society a very large outlay. It was true, that a very large amount of the subscriptions now received were on the express condition that the Fair if held at Detroit, should be within the limits of the city; but if this proposition were accepted, at least \$1500 would be saved which would otherwise have to be paid for the erection of buildings.

2. Mr. King offered a very eligible site for the fair, on a portion of the city known as the Cass Farm. This lot was situate near the junction of the Grand River Road with Woodward Avenue just behind the hay and wood market on Cass street. It was approached by several streets, and in many respects was very preferable. The terms for the lot were, that the Society could have from twenty to 25 acres, to use for the Fair, for \$200; or Mr. King would fence in with a good and sufficient fence, twenty acres, for \$500, the fence to be his; or he would in addition thereto, for the sum of \$1400 more, put on the grounds, buildings equal to those now on the grounds at Hamtramck, the buildings to be his, after the Society had done using them for 1858.

3. Mr. S. S. Foster offered the use of his grounds, named "The Ladies Riding Park," situate on Woodward Avenue, some distance above the Grand Circus. These grounds contained nearly twenty acres were already fenced, with a good tight seven foot fence, had a well worked half mile track, and some other fixtures which could be used by the Society. The terms were for the use of the grounds, fences, and fixtures, for \$250, with leave to erect and take off such buildings as the Society might require, at any time within the duration of said Foster's lease; and the rate of \$300 would only be charged for the use of the grounds should a fair be again held in the same place. If no fair were held, then no charge to be made. Liberty would also be given to alter the fence, and to erect gates and construct entrances, wherever they might be required.

Mr. Wells, submitted propositions on the part of the citizens of Kalamazoo:

Should it be decided to hold the fair at Kalamazoo, the grounds now occupied by the County Society, and the race track adjoining would be put at the service of the Society at a cost not to exceed \$100. These grounds were triangular in shape, and were now fenced on two sides. The approach to these grounds was all that could be desired, and the space within was ample. The citizens of Kalamazoo had already agreed to subscribe \$1500, and when it was once ascertained that the fair was to be located at that place, this amount would be largely increased, possibly by three or four hundred dollars more. The necessary buildings could be erected at much less expense than in Detroit, as lumber and labor could be procured for less prices; and on very reasonable terms. The only difficulty would be for accommodations, as there was no doubt that if the fair were held so far west, and the weather should be favorable the population of the western counties would turn out *en masse*. To meet this contingency, arrangements could be made with the Central Railroad, by which special trains would be run night and morning as far east as Marshall, and the hospitalities of the citizens of Galesburgh, Battle Creek and Marshall, could be depended on to accommodate large numbers. The citizens of Kalamazoo, and of the surrounding country would also use every exertion to prevent man, woman or child from going away dissatisfied. The village of Kalamazoo was not quite as large as Detroit, but the people who resided there had hearts quite as large, and no one would be allowed to suffer for want of a resting place. The citizens of Kalamazoo were also desirous that the people of the State should have an opportunity of inspecting the State institution located there, as well as the public educational establishments, which were all on a large scale, and which would afford lodging room for all who might favor the village with their presence during the fair. There was little doubt also, that the interests of the Society itself would be greatly promoted, by moving the fair westward; as it was well known that its benefits were not appreciated by the people of Detroit.

Mr. Crippen offered the following resolution:

Resolved, That it is the opinion of this committee, that all proposals being equal it is the policy of the State Society to hold the next annual fair at some other point than the city of Detroit.

Mr. Tibbits moved that the said resolution be laid on the table, but it was negatived.

Mr. Newell moved that the Committee adjourn to meet at eight o'clock to-morrow morning to examine the several grounds offered by the citizens of Detroit on which the fair may be held. Negatived.

The resolution of Mr. Crippen was then laid on the table.

Mr. Wilcox offered the following resolution:

Resolved, That the Secretary be directed to address a circular note to each member of the Viewing Committees informing the party of his or her appointment and requesting a reply, which shall state whether his attendance can be depended upon be sent in time sufficient before the fair to permit the Executive Committee to fill any vacancies. The omission to reply will be considered a declination of the appointment.

Adopted.

Mr. Nowell offered the following resolution,

Resolved, That the Business Committee shall locate the fair of 1885, at the city of Detroit, provided that a reliable subscription of \$200 be raised within ten days, from this date, otherwise the fair shall be held at Kalamazoo.

Mr. Crippen moved to adjourn. Lost.

Mr. Tibbits offered the following resolution as a substitute:

Resolved, That sufficient inducement has already been offered by the citizens of Detroit to warrant the Business Committee in locating the fair at that point.

Laid on the table.

On motion the Committee adjourned till eight o'clock to-morrow morning.

TUESDAY MORNING, JULY 20.—The Committee met, and the President being absent, on motion of Mr. Wells, A. N. Hart, Esq., was chosen President *pro tempore*.

On motion of Mr. Newell, the Committee then adjourned to visit the several grounds on which it was proposed that the annual fair should be held. On their return, on motion of Mr. Newell, the resolution offered by him last evening relative to the location of the fair was taken up and passed.

On motion of Mr. Greene,

Resolved, That a vote of thanks be tendered to the citizens of Kalamazoo for the liberal propositions which have been submitted by them to the State Society for its accommodation during its annual fair.

On motion of Mr. Crippen:

Resolved, That the Business Committee be authorized to contract with S. S. Foster, on the terms mentioned in the proposals, for the use of the grounds known as the the Ladies Riding Park, and that the fair be there located, if held in Detroit.

Adopted.

On motion of Mr. Welch,

Resolved, That the Common Council of the city be requested to make suitable provision for police, and for the regulation of the omnibuses and carriages by establishing stated rates for the conveyance of passengers to and fro.

Table.

On motion of Mr. Crippen:

Resolved, That this committee do now adjourn to meet on the 28th of September at 7 o'clock P. M.

Adopted.

The committee then adjourned.

The Crops and the Markets.

For the past month the daily and weekly papers have contained accounts of the wheat crop. From these and our own observations, we have arrived at the conclusion that the wheat crop of this State will be much below an average. In speaking thus it may be well to define what an average crop is. An average yield of wheat in this State means that every acre sown shall produce neither more nor less than fourteen bushels per acre. During the past year the amount of surface sown with wheat was very large, and the seasons of winter and spring were such as to promote a most luxuriant growth. This excellent condition of wheat in all sections was the subject of remark and continued up to the second week of June. After this date a series of extremely hot days, with a moist state of the atmosphere, developed the rust enormously, and has affected the crop. Another evil which has done as much damage is the Wheat Fly, erroneously named the *weevil*. These two causes have reduced the crop much below an average, although the growth of straw is the largest known for several years. Fields that would have given from thirty to forty bushels have yielded but twenty to twenty-two in some cases where the grain has been thrashed out. Many fields in some of the best wheat growing districts, have hardly been worth cutting. Still there is a large quantity of wheat, and we think so far as this State is concerned that there will be an average of from eight to ten bushels or about three fifths of a full crop.

The accounts from other States are somewhat contradictory, but seem to give promise of very fair crops in some localities, whilst in others they are most certainly very inferior. As advanced rates for wheat and flour depend in great part on the foreign demand, we may not neglect what is said of the wheat crop on the other side of the Atlantic. We find, therefore, that the most reliable reports from Great Britain say that the wheat fields are promising as great a yield as they did last year, and that new wheat was expected to be offered in their markets as early as the last of July. The spring crops do not promise as well. The Farmers Magazine and Marks Lane Express says, "we shall commence the consumption of the new crop, with the largest quantity of old corn on hand, in barn and stack, almost ever remembered." With this great home supply, there is a great pressure of continental wheat on all the British markets. It is true that unfavorable accounts of the bread crops have been received from Southern Europe, but in France and Algeria the wheat crop has been good. We cannot look for any great advance in rates from a large demand on the other side of the Atlantic, and as we think there will be, with the amount remaining from last year's crop yet unsold, an average surplus over and above our own consumption, any important advance cannot reasonably be looked for, more especially as the business of the country in all branches is reduced to its lowest limits.

The crop of hay throughout the State is immense, and we doubt very much that there is stock enough to consume it. It has also been secured in the best condition. The corn crop is promising well, especially on the opening lands, where it was got in early. In other soils it is small, but looks well, and there will be unquestionably a full crop. Potatoes will be small, and the crop we think will be deficient, in many places, and less than an average. The oat crop will be good, barley will not be so good a crop as it was last year.

The prices to be given for new wheat is not yet settled, but choice samples of Michigan white will be in demand at the highest going rates at all seasons. Some samples have already brought close up to 95 cents in the Detroit market.

The wool market is closed, nothing being done or said on the subject. By many it is thought the crop has been bought at too high rates, and after the excitement of buying in clipping time there is now a reaction. But it will be seen in the course of a few months that wool has not brought more than it was worth. From the remarks on the market in the eastern papers, the manufacturers do not appear to feel very bad or discouraged at the prices paid.

THE JUDGES AT THE STATE FAIR.—The Secretary of the Society is mailing circulars to each person appointed on the Viewing Committees at the State Fair. It is important that answers of acceptance should be returned as soon as possible; to enable the Executive Committee to fill up the vacancies previous to the opening of the Fair.

THE TRANSACTIONS FOR 1857.—The officers of the County Societies who have not already sent in reports of the proceedings of their County Societies will confer a favor on the Secretary by transmitting such reports immediately. Circulars have been sent to each of the Secretaries of the County Societies, and answers are requested to be sent in as soon as possible.

The State Fair.


The Annual Fair of the State Agricultural Society will be held at Detroit, and the Business Committee have secured the grounds occupied by Mr. Foster as a riding park and school for ladies. These grounds are very eligibly situated on Woodward Avenue, about a mile from the City Hall, with good sidewalks on both sides of the street leading to them. The area contains about twenty acres, and a good new fence seven feet high now surrounds the whole. Around one portion of it is a new track for carriages, wide enough to permit four teams to be driven abreast, and also to permit a fair test of the speed of the trotting stock. Besides this there is an amphitheatre well enclosed, which is to be used for the exhibition and examination of the live stock.

The Committee are making arrangements to have sufficient buildings to permit of a full exhibition of the products of the State, and also to secure them from the effects of the weather. The rules and regulations as well as the method of examination of stock, are to be modified and changed, so that none will have just ground for complaint that their animals have been overlooked through inattention or hurry on the part of the several committees.

It is the design of the Business Committee also to furnish good sheds for the most of the cattle, and stabling for the horses, so that all animals shall be kept on the grounds during the days of the fair. The Society will furnish hay and straw for the use of stock, but no feed or grain. Arrangements will be made by which a supply of feed, grain and pumpkins will be furnished at fair rates on the fair grounds.

The arrangements are not yet all perfected, but we hope by our next months issue to be able to speak more fully on the subject.

TUSCANY AND AUSTRALIAN WHEAT.—Mr. Dougherty of Berrien Springs, has lately shown us some samples of Tuscan and Australian Wheat, which for this year compare favorably with the crop of 1857. Mr. Dougherty informs us that the Tuscan withstands the attack of the Hessian fly, and that with him the Australian variety is very prolific. He left with us samples of both which can be seen at this office. He sold to the Patent Office two hundred bushels of the Tuscan for distribution.

 **The Third Volume of the American Cyclopaedia** is nearly ready for delivery, and the contents are equal in interest, variety and treatment to those of the preceding volumes. Edward Everett, George Ticknor, A. A. Gould, George S. Hillard and other well known writers are amongst the contributors. Amongst the biographies are notices of Col. Benton, Berzelius, Beecher family, the Bonapartes, Daniel Boone, F. P. Blair, Vice President Breckenridge and others.

Notes and Queries.

Some pigs.—In visiting Northville last month, I called upon Dr. A. A. Gardner of that place, and was shown some pigs of his raising, of such remarkable size and beauty that I think them well worthy a notice in the *FARMER*. There were six of them, all white, and as clean, and about as handsome to look at as animals, as so many plump, fat babies. They are real pets, and at the sound of their master's voice, come running towards him to have their ears and their sleek sides patted by his hand. They are short-legged, round and long bodied, and one of them at four months old weighed one hundred and forty pounds. They were not put up to fat, but running loose in the barn yard. Such pigs will make pork by next fall that might tempt a Jew from his faith.—*

Red Tuscany Wheat—the Wheat fly.—I noticed in your June number that Mr. B. P. Johnson, of New York, destroyed a quantity of wheat that he received from the Patent Office, because he found the weevil in it. I also received several packages of wheat known as Tuscany red wheat which was partly destroyed by the weevil, but instead of doing as Mr. Johnson did, I killed the weevil by pouring boiling water over the wheat a few times and draining it off immediately. I must confess I had but little faith that the wheat would grow, but it did, and I send you the enclosed heads as samples of the product.

Wheat in this section is much injured by the midge and the rust, except the Mediterranean, which I think is not hurt by either, it being too early for the midge, and I think it not as liable to rust as later varieties of wheat. I commenced harvesting my Mediterranean on the 7th of July. I shall not dare sow any but this variety next fall, for fear of the Midge.

I find that farmers will persist in calling the midge the weevil. There is a vast difference between the two insects. The weevil is a bug similar to the pea-bug, and its habits are similar also. It will eat the wheat in the bin all winter, or till all is eaten. The distinction between the two insects can be seen by reference to the third volume of the Patent Office Reports. Yours respectfully,

C. H. ROCKWOOD.

Genesee, Mich., Ju'y 16, 1858.

[The heads sent us were of medium length, and good samples of a bearded red wheat. The berry long and rather shrunken, but of good size; the pannicles not thickly set together but rather apart and straggling. The wheat, if well grown would probably make a productive hardy variety, that would grow where the finer white sorts had little chance.

We are well aware that what is called the weevil, is not what was originally known as the true weevil. But such is the name now given to the yellow-orange larva of the the Wheat Midge or wheat fly, and which is thus called to distinguish it from the species which lays its egg in the stalk. The one being called by the Entomologists *Cerydomia destructor* and the other *Cerydomia tritici*.—Ed.]

Received—Letter from E. T. B., on Long Woolled Sheep, will appear next month.—Copies of Prince's Catalogues of Bulbous Flowers, of Strawberries, and of Roses, Carnations, and other flowering plants. Mr. Prince sends these catalogues to all applicants—see his advertisement.—Annual Report of the Board of Water Commissioners.

Correction.—On page 166, in the article on Ohio Farming, the number of bushels of oats raised should be 193 instead 293, as printed. The amount raised per acre was 96 bushels.

The Stump Puller.—The season is now approaching when much work can be done in the improvement of farms by draining and clearing them of the stumps; and no machine equals the Willis Machine for the latter operation. It will clear off more green or half decayed stumps than any other invention known if rightly handled. One machine in a township, if kept at work, will alter the face of the country in such a short time that it would hardly be known. Mr. Blackmar, the proprietor of the patent for this State, has authorized us to sell machines and rights in any of the territory of this State yet unsold, and men can make few better investments to go into a timbered country than in the purchase of one of these machines, and a township right. The Detroit Locomotive Works are manufacturing these machines in the best manner, with very heavy hooks and chains of the best Lake Superior iron. As we know this machine to be the best and most powerful in use, we shall be gratified to see them spread and at work over the State, and will promptly answer all inquiries in relation to them, that may be sent to us.

The N. Y. Agricultural College.—We note that Judge Cheever has resigned the position of President of the N. Y. Agricultural College, and that he assigns, as a reason, that there will be nothing for him to do for two years, as it will take that time to complete the building at the rate they are now progressing. In this letter Judge Cheever also seems to think that more labor, agricultural and educational, would devolve upon the President than he would care to encounter at his time of life.

We perceive by the announcement in the Ohio Farmer, that its editor, Thomas Brown, Esq., has been parted from his wife by death. We most sincerely sympathise with our brother of the Agricultural Press in his bereavement.

The Editor of the London Field recommends turpentine to be rubbed on horses that are in the habit of rubbing their tails and manes.

A New York Hotel.—To those who may visit New York we commend the advertisement of the Blancard House. The proprietors are gentlemen of experience in their business, and will make their guests feel as much at home as if they were close to their own firesides. The charges are moderate, and the location of the house agreeable and pleasant.

Devon Stock.—It will be seen that Mr. Chas. Betts of Burr Oak offers for sale some Devon cattle which are well worthy of the attention of breeders, and to which we call their attention.

The Printer. is the name of a monthly printed in the very best style of the art, and which is devoted to the interests of the business. It should be well sustained, by all interested in the business, as it is a periodical that must prove of the greatest utility to them.

The Haines Sale.—The public sale of Shorthorn cattle, horses, hogs and sheep, which was advertised by Messrs. B. & C. Haines of Elizabethtown, N. J., took place on the 16th of June. Two of the bulls were withdrawn, but the others sold for prices ranging close to \$200. The cows and heifers sold at various rates, ranging from \$60 to \$700. Mr. Kelly of Rhinebeck purchased "Gertrude" at \$215; Timothy Mather of Hartford, Conn. "Nymph" 5th \$250; A. B. Conger of New York "Imported Zoe" at \$325; D. B. Kershaw of Phila, "Nymph 7th" at \$700; Wm. Hurst of Albany bought the celebrated mare "Black Hawk Maid, which is so often cited as a daughter of Black Hawk, for \$225. Suffolk pigs sold at \$100 to \$15 and Berkshires at \$10 to \$18 per pair.

A good Book on Farriery.—The volume entitled "Every man his own Farrier" published by E. & W. Wallingford, of Ann Arbor, is an excellent practical treatise on the diseases of the horse, and may be studied with profit by any one who handles horses. It will be seen by the advertisement that Geo. S. Hazen of Saline, is sole agent for its sale.

The Rarey System.—We call attention to the advertisement of Caleb H. Rarey, of Albany, N. Y. whom we believe to have the true system of the celebrated Rarey. At any rate, knowing as we do, two or three systems of horse taming, and also the principles of Mr. Rarey, we feel satisfied that his system, is what it professes to be, and is different from others; and more thoroughly calculated to subdue refractory animals.

Farm for Sale.—The farm advertised for sale is located near the well known Belknap farm, which we learn has passed into the hands of eastern men, on which there is now being built a steam flouring mill, and some other important improvements.

County Societies.—The officers of the several county societies should send us in the time and place of holding their annual exhibitions, and the name and Post Office of their Secretaries, as soon as possible. We have many inquiries already in relation to these important events.

Columbus Colts.—We noted some time since that E. N. Wilcox had become the possessor of a colt from Columbus. This colt is out of the celebrated fast mare, known as the "Kibbe Mare," an animal having a close descent from Imported Messenger, whose description will be found in this number of the FARMER. In our first notice we stated that the colt was from Lady Washington, but this was incorrect. We learn also that Mr. Niles of Troy Corners has got a colt from Columbus. It will thus be seen that some of his stock will be left amongst us.

The Cincinnati.—Amongst our exchanges, we find the *Cincinnati*, published at College Hill, Ohio, a monthly periodical, which has improved greatly in appearance and merit during the past two years. The *Cincinnati*, has for its leading feature, the educational elevation of the Farming community, and connects this object with scientific Agriculture, Horticulture and Pomology. It is edited with much ability by F. G. CARY, Principal of the Farm School, which he has established near the city of Cincinnati, and with him are connected Professor Bostworth in the chemical department, and Professor Wood in the Botanical department.

The Ayer's Medicines.—We call attention at this season to the advertisement of Dr. J. C. Ayer. Few medicines have stood the test of time with such success as his; and in the present sickly time, it will be well to note their remarkable properties.

Salt on Wheat.—I salted fourteen acres of wheat last September, and now it surpasses any I have seen, and is much superior to eleven acres in the same field on which no salt was sown, both being sown on the same day, and fallowed in the same manner. I have no doubt it will mature at least four days previous to the eleven acres, and those four days may put it out of danger from the midge. I get better results from salt when dry weather prevails for some time after it is sown, and I sometimes sow seventy-five barrels in one season, buying it at wholesale at the manufactory. I generally sow it immediately after the wheat is sown, but if I was to be guided by theory I would sow it before, and harrow in with the wheat. I have often thought about trying it in this manner, but have not done so."—*John Johnston in Ohio Farmer.*

The Scott Publications.—Amongst the periodicals we receive are the four British Reviews, and Blackwoods Magazine. We have always considered Mr. Scott a public benefactor, to the literary and scientific community by furnishing at the lowest rates, the best series of essays and criticisms in the language. And he is still more entitled to a liberal support from the fact that he does not pirate these republications, but actually pays a fair copyright price for the use of the copy. There is no better investment can be made of 10 dollars in books, than what he furnishes.

The American Merchant.—This is the title of a new periodical, published by Messrs. Bryant and Stratton of New York, and is to be devoted principally to Commerce, Banking, and statistical information. The publishers have secured the services of many able writers, on these subjects; and their own experience in carrying on a number of commercial institutes in the various portions of the United States will enable them to produce a Journal of great service. The first three numbers promise well for the future.

Mr. J. A. Baldwin is General Agent for the Farmer, and is authorized to collect and settle all accounts, and to receive subscriptions.

The Markets.

BREADSTUFFS AND GRAIN.		SEEDS, PLASTER, SALT, &c.	
Flour, bbl.	\$4.00 a 5.00	Clover per bush.	\$4.00 a 5.00
Cornmeal, 100 lbs.	1.30 a	Timothy.	2.50 a 3.00
Buckwheat, 100 lbs.	0.90 a 0.00	Red top.	0.00 a 2.00
Wheat, red, bush.	0.90 a 0.00	Blue grass.	1.25 a 3.00
do white, bush.	0.90 a 0.00	Millet, 0.50	Hungarian grass \$3
Corn, bush.	0.55 a 0.56	Sandusky plaster, bbl.	1.25 a
Oats, bush.	0.34 a 0.35	Grand River.	1.50 a
Barley, per 100 lbs.	1.00 a 1.12	N Y Plaster.	1.15 a
BEEF, MUTTON, &c.		Sandusky water lime.	1.50 a
Beef on foot.	\$2.50 a 3.25	N Y do.	1.31 a
Beef dressed.	4.50 a 5.50	Salt fine bbl.	1.50 a
Sheep, dressed per lb.	0.33 a 0.05	do coarse.	1.75 a
Sheep on foot.	1.50 a 3.00	MISCELLANEOUS.	
Hogs per lb 6c, per 100.	4.00 a 5.00	Apples per bush.	0.00a 0.00
Turkeys.	1.00 a 1.25	White fish, half bbl.	4.00 a 4.50
Chickens, pair.	0.25 a 37½	White beans per bush.	0.55 a 0.60
Geese.	37½ a 0.50	Sheep pelts.	0.15 a 0.20
Eggs per doz.	9 a	Hay, Timothy, ton.	6.00 a 8.00
Butter, per lb fresh.	12 a	Common.	4.00 a 5.00
do skinned.	10 a	Honey.	14 a 0.15
Cheese per lb.	7 a	Potatoes, new.	0.75 a

EVERY BODY ATTENTION.

Just Published a new and important work on Farriery entitled, "EVERY MAN HIS OWN FARRIER."

It is truly valuable book is a Reprint of a Celebrated English work written by one of the most scientific men of the Royal Veterinary College in England, and a man that has had Forty Years Practical Experience in the Treatment of all diseases incident to that most noble animal, the Horse. It was published under the sanction of the Royal Veterinary College for the benefit of the English Government and has been reprinted and published by E. & Wm. Wallington, for the benefit of the American public. It is a book of over three hundred octavo pages, printed in Elegant style in gilt embossed covers and contains over 200 valuable recipes for the cure of all the various diseases of the horse. It gives the cause and symptoms of all the Diseases in a style that all can understand; following each Disease with its own recipe all of which are known to effect a cure if applied in season, according to the Directions. It is adapted to the wants of all classes of persons, the Farmer, the mechanic, the merchant, the professional man, and all owners and dealers in horses.

Hundreds of Dollars annually in horses and cattle, may be saved by consulting this work. We think we may safely assert that this is by far the most valuable work on the diseases of the horse extant. READ THE FOLLOWING.—We the undersigned take pleasure in saying that in our opinion no work of the kind extant has a higher claim to the confidence of horse owners and breeders than this, as in our opinion the remedial agents therein recommended are eminently adapted to the cure of the diseases therein described.

We hope the enterprising publishers will meet with a rapid sale of their book, for we think it to be a very excellent work.

Eberbach & Co., Ann Arbor J. B. Newland.
R. L. Speechly, Heckman. Geo. Sutton, Esq.
James Kingsley, Esq. Rufus Knight, Esq., and others.

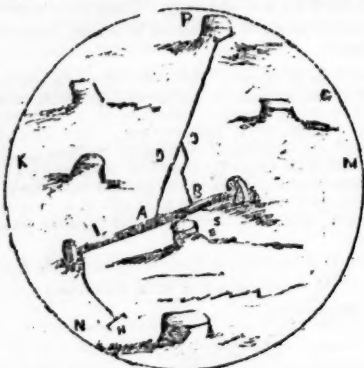
PRICE \$1.50.

Published by E & Wm. WALLINGTON,
Ann Arbor Mich.

Geo. S. Hazen sole agent for the United States all orders addressed to Box 110 Saline, Mich., will meet with prompt attention.

PREMIUM STRAWBERRIES.

WM. H. PRINCE & CO., Fushing, N. Y., will send their **New Descriptive Catalogue of Strawberries** to applicants who enclose stamp. It comprises every estimable variety and the prices average lower than elsewhere. In no case will any variety be charged above the lowest named by others. Catalogues of every other department of Nursery stock sent gratis.

THE PREMIUM STUMP PULLER

THE WILLIS STUMP PULLER is the most powerful and most economical machine in use for pulling stumps; and will clear a field in less time than any other invention of a like kind.

Twenty three stumps have been pulled with this Machine in an hour and fifteen minutes.

The undersigned will sell machines and rights to use and manufacture in any part of Michigan except the counties of Hillsdale, Branch, Wayne, Washtenaw, Jackson, Calhoun, Kalamazoo, Van Buren, Macomb, Genesee, Shiawassee, Saginaw, Tuscola and St. Clair, which are already sold.

All necessary information as to price, mode of using, will be given on application to **D. VID BLANCHARD**, Ypsilanti or to **R. F. JOHNSTONE**, Editor Michigan Farmer.

The Machines are manufactured at the Detroit Locomotive Works from the best Lake Superior Iron.

BLANCARD HOUSE.

BROADWAY & TWELFTH STREET, NEW YORK.

THIS SPACIOUS AND ELEGANT ESTABLISHMENT is located in the most fashionable part of the City, on the highest point of ground south of UNION SQUARE, making it the most pleasant and healthful location in the Great Metropolis.

THE ROOMS are finely ventilated, well lighted, and many of them constructed in suits of Parlors and Chambers communicating with each other, and gas, suitable for families, and parties travelling together.

MANY LINES OF STAGES pass the door, and the FOURTH AVENUE CAR runs within one block, by which the lower (or business) part of the City is reached in eight or ten minutes.

THE HOUSE has been thoroughly renovated and refurnished, and is now open for the reception of guests.

THE APPOINTMENTS AND ARRANGEMENTS throughout are extensive and liberal, and no extortion will be practiced or tolerated by the management.

THE LARDER AND CELLARS will at all times be stocked with the best and our patrons are assured that no pains or expense will be spared to make their stay at the BLANCARD HOUSE in all respects agreeable.

THE PRICES for full board at the Table d'Hôte will be limited to Two Dollars per day. By the week at lower rates.

ROOMS will be let separately, if desired, and meals served by the card, either in private parlors or at ordinary.

ROOMS WITHOUT BOARD, by the day or week. MEALS served at all hours to order.

BLANCARD & MAC LELLAN.
JOHN M. BLANCARD, late of the "Pavilion" at New Brighton.
C. J. MAC LELLAN, late of "Jones," and "United States" Hotel, Philadelphia.

DEVONS FOR SALE.

I OFFER for sale two Devon Bulls—Michigan and Walton, whose pedigrees have been published in the MICHIGAN FARMER—also Marsh and her calf, now three months old. I will sell low for cash. Credit given if desired, where satisfactory security or reference is furnished. Address **CHAS. BETTS,** Burr Oak, Michigan.

FARM FOR SALE.

IN BURR OAK, St. Joseph Co., Mich., containing 80 acres, 65 acres under culture, 25 timber, consisting of beech, maple, whiteoak, ash, &c., running water, plenty of stone on the timbered portion, fruits of all kinds—apples, peaches, grapes, cherries, plums, raspberries, strawberries, &c., &c. Situated $\frac{3}{4}$ mile from the railroad station, at Burr Oak—a smart growing village. The cultivated portion is what is known as "Burr Oak land"—the very finest quality of soil in the western States. A stream of water separates this from the timbered portion. For price and terms address me at Burr Oak, Michigan. **CHAS BETTS.**

IMPORTANT.

TO THOSE SOLDIERS (or their Heirs) who served in the State of New York—War 1812. By the act of 1857, the Volunteers and Drafts no matter where now residing, can obtain pay for the clothing and Equipments furnished by them, and for cash paid for contingent expenses.

No time should be lost. You need to write or call soon upon **ELISTA CHASE, Justice of the Peace, No. 7 Larned St. Rotunda Building, Detroit.**

Claimants must have had, or be entitled to receive a Land Warrent.

SPEAK TO YOUR FRIENDS.—Full information given how to proceed. Claims are of various amounts—\$50 to \$200 **LAND WARRANTS AND PENSIONS PROCURED.**

July 24, 1858.

aug11

FARMERS OF MICHIGAN!

COX, HIBBS & CO'S

Patent Threshing Machine and Cleaner!

AGAINST THE WORLD!!

Three Rivers, Michigan.

THESE Machines have been used for several years in the States of Missouri, Illinois, Wisconsin, Indiana, Michigan, and Pennsylvania, and have thus far proved in every respect decidedly superior to all others, being simple in their construction, durable, easy on the team, not likely to get out of repair.

Threshing as much or more than any and cleaning the grain ready for market without waste!

Being determined to outstrip all competitors, we are now fitting the Machines up with an **Iron Concave and Cylinder**, the Concave being perforated, so as to allow three-fourths of the grain to pass through before it strikes the Separator. The rakes are also so constructed that none of the grain can pass over with the straw.

The Eight-Horse Machine will thresh without worrying the team, **From 300 to 400 bushels per day.**

The Six-Horse Thresher and Cleaner will thresh **From 250 to 300 bushels per day.**

The Four-Horse Thresher and Cleaner, will thresh **From 150 to 250 bushels per day.**

The Two-Horse Thresher and Cleaner, will thresh **From 150 to 200 bushels per day.**

Robert's Patent Lever Horse Power, is universally acknowledged as being the most simple in construction, the most portable, and in every respect the best in use.

The Endless Chain, or Railroad Power, is very durable, wrought iron links being used instead of cast iron, consequently they are not so liable to break or wear out.

If Orders for these Machines are coming in almost daily, and as we were last year unable to supply the demand, we would advise all desiring to purchase to apply soon.

We would also say to all, call and examine our Machines, and the Testimony of those who used them, before purchasing elsewhere.

PRICES OF THESE MACHINES.

The price of the Two Horse Power and Thresher, is \$240 cash or \$265, half cash balance on time. Six-Horse, same price. Eight-Horse, \$250 cash; or \$275 half cash, balance on time.

If Circulate sent gratis, or any other information cheerfully given on application to the proprietors.

ON HAND ALSO,

Machines for Sawing Wood, Circular Saws, Rubber Belting, Corn Shellers, Clover Hullers, Plows, Road Scrapers of the best patterns, &c.,

Orderings of all kinds made to order.

Repairs of all kinds promptly attended to. Terms reasonable. Remember that we employ none but the best workmen, and warrant our work.

COX, HIBBS & Co.

Three Rivers, Michigan.

N. B. We have also patterns for other smaller Machines, to accommodate all who may desire them. June 30



Ayer's Pills

Are particularly adapted to derangement of the digestive apparatus, and diseases arising from impurity of the blood. A large part of all the complaints that afflict mankind originate in one of these, and consequently these PILLS are found to cure many varieties of disease.

Subjoined are the statements from some eminent physicians, of their effects in their practice.

AS A FAMILY PHYSIC.

From Dr. E. W. Cartwright, of New Orleans.

"Your Pills are the prince of purges. Their excellent qualities surpass any cathartic we possess. They are mild, but very certain and effectual in their action on the bowels, which makes them invaluable to us in the daily treatment of disease."

FOR JAUNDICE AND ALL LIVER COMPLAINTS.

From Dr. Theodore Bell, of New York city.

"Not only are your PILLS admirably adapted to their purpose as an aperient, but I find their beneficial effects upon the Liver very marked indeed. They have in my practice proved more effectual for the cure of *bilious complaints* than any one remedy I can mention. I sincerely rejoice that we have at length a purgative which is worthy the confidence of the profession and the people."

DYSPEPSIA—INDIGESTION.

From Dr. Henry J. Knox, of St. Louis.

"The PILLS you were kind enough to send me have been all used in my practice, and have satisfied me that they are truly an extraordinary medicine. So peculiarly are they adapted to the diseases of the human system, that they seem to work upon them alone. I have cured some cases of *dyspepsia and indigestion* with them, which have resisted the other remedies we commonly use. Indeed I have experimentally found them to be effectual in almost all the complaints for which you recommend them."

DYSENTERY—DIARRHŒA—RELAX.

From Dr. J. G. Green, of Chicago.

"Your PILLS have had a long trial in my practice, and I hold them in esteem as one of the best aperients I have ever found. Their alternative effect upon the liver makes them an excellent remedy, when given in small doses, for *bilious dysentery and diarrhœa*. Their sugar-coating makes them very acceptable and convenient for the use of women and children."

CONSTIPATION—COSTIVENESS.

From Dr. J. P. Vaughn, Montreal, Canada.

"Too much cannot be said of your PILLS for the cure of *costiveness*. If others of our fraternity have found them as efficacious as I have, they should join me in proclaiming it for the benefit of the multitudes who suffer from that complaint, which, although bad enough in itself, is the progenitor of others that are worse. I believe costiveness to originate in the liver, but your PILLS affect that organ and cure the disease."

IMPURITIES OF THE BLOOD—SCROFULA—ERYSIPELAS—SALT RHEUM—TETTER—TUMORS—

RHEUMATISM—GOUT—NEURALGIA.

From Dr. Ezekiel Hall, Philadelphia.

"You were right, Doctor, in saying that your PILLS *purify the blood*. They do that. I have used them of late years in my practice, and agree with your statements of their efficacy. They stimulate the excretories, and carry off the impurities that stagnate in the blood, encumbering disease. They stimulate the organs of digestion, and infuse vitality and vigor into the system."

Such remedies as you prepare are a national benefit, and you deserve great credit for them."

FOR HEADACHE—SICK HEADACHE—FOUL STOMACH

—PILES—DROPSY—PLETHORA—PARALYSIS—FITZ-&C.

From Edward Boyd, Baltimore.

DEAR DR. AYER: I cannot answer you what complaints I have cured with your PILLS better than to say *all that we ever treat with a purgative medicine*. I place great dependence on an effectual cathartic in my daily contest with disease, and believing as I do that your PILLS afford us the best we have, I of course value them highly."

Most of the PILLS in market contain Mercury, which, although a valuable remedy in skillful hands, is dangerous in a public pill, from the dreadful consequences that frequently follow its incautious use. These contain no mercury or mineral substance whatever.

Prepared by Dr. J. AYER,

PRACTICAL AND ANALYTICAL CHEMIST,

LOWELL, MASS.

And sold by J. S. Farrand, Detroit, and by all Druggists every where. feb'68-ly

FURNITURE WAREHOUSE, ON JEFFERSON AVENUE.

BELOW MICHIGAN EXCHANGE, DETROIT.

The Subscribers keep constantly on hand a large stock of

ELEGANT FURNITURE,
Both Modern and Antique Styles; in Rosewood,
Mahogany and Domestic Wood.

Those wishing rich and fashionable Furniture, will always find a great variety to select from—equal in every respect to anything in the Eastern market. Being in constant receipt of Pattern Pieces from the

FASHIONABLE MAKERS IN NEW YORK

they are enabled to guarantee the most PERFECT SATISFACTION to their customers.

They also keep constantly on hand a large and complete assortment of Plain Furniture of Mahogany, Cherry and Walnut. In short, every article in the line of Household Furniture will be found in their Stock, including Chairs of every style and price, from four shillings to sixty dollars each. The subscribers now have on hand, and make to order, best

HAIR MATTRESSES.

Their customers can rely upon getting a genuine article.

CORN-HUSK MATTRESSES AND STRAW PALLIASES

constantly on hand. For the trade we keep constantly a large stock of Mahogany and Rosewood Veneer. Jan '68, tf. STEVENS & ZUG.

PILES! PILES! PILES!

This hitherto intractable disease, of every form and in every stage,

CURED BY EXTERNAL APPLICATION ONLY.

DR. CAVANAUGH'S PILE SALVE

WILL never fail in giving immediate relief and positively curing the worst and most obstinate cases of Hemorrhoid, or Piles. It is the only

INFALLIBLE REMEDY KNOWN

here or elsewhere for the Piles, and is the result of years of patient study and investigation.

Sufferers from Piles now have a remedy at hand which will

STAND THE TEST OF TRIAL,

without a fear of failure on its part, to do all the proprietor claims for it.

Full directions accompanying each box; and all that is requisite is strictly to observe them, and a cure is certain to follow.

The proprietor refers to the following testimonials from gentlemen of character and standing, who have voluntarily given their certificates in its favor, in regard to its efficacy in their own cases. Read them.

The following is from one of the most reliable citizens of Chicago, the late Treasurer of Cook Co., Ill.:

CHICAGO, July 25, 1855.

DR. CAVANAUGH—Dear Sir, I wish hereby to make known to the afflicted that I have been troubled with the Piles for twenty years or upwards, and at times most severely. And during a recent and exceedingly painful attack, a friend procured a box of your Salve and asked me to give it a trial. I did so. Not, however, with the expectation of benefitting my disease, for truly, I had tried so many applications I had lost confidence in all. But in making use of your Salve, I soon found that it was doing me good; and really it is incredible to myself, that with only about two weeks use of your Salve, I am, so far as I can judge, a well man.

I most cheerfully make this statement, believing it due both to yourself and such as may be afflicted with the most trying and painful disease. I do not hesitate to say that I consider your preparation an invaluable remedy for the Piles.

Most sincerely yours,

H. N. HEAL.

The Hon. Richard Yates, late member of Congress from the Springfield, Ill., District, says:

JACKSONVILLE Ill., Nov. 15, 1851.

DR. THOS. H. CAVANAUGH—Dear Sir: The preparation, Cavanaugh's Pile Salve, which you furnished, I found of great service producing an easy and speedy cure. I do not hesitate to recommend it as an invaluable remedy for the Piles.

Respectfully,

RICHARD YATES.

Also Dr. T. H. Cavanaugh's Celebrated

GREEN SALVE.

Price \$1 per box. For sale by H. & L. SIMONEAU, Wholesale Agents.

Dec. 1yr

DR. T. R. CAVANAUGH, Sole Proprietor,
St. Louis, Missouri.

JACKSON NURSERY.

THE Proprietors of the Jackson Nursery having entered largely into the Nursery business, offer for sale a superb stock of

Apple Trees.

Well grown, thrifty, and stocky, of the choicest varieties, propagated with great care, and well supplied with fibrous roots. We have on hand also a choice lot of

Cherry Trees.

These are large and handsome trees. Also a superior lot of

Pear Trees.

Standard and Dwarf, very stocky and healthy. Dwarfs well furnished with limbs. Also

Peach Trees,

One year old from the bud, of the best varieties, and well grown.

We have also for sale,

PLUM, APRICOT, AND ORANGE QUINCE TREES,

With a general assortment of Small Fruits.

And a variety of Ornamental Trees and Shrubs. Also a superior lot of

Norway Spruce, Balsam Fir, Scotch Pine and American Arbor Vite.

Well cultivated and grown on dry soil. Also a splendid assortment of

Strawberry Plants.

Containing many new and popular varieties, all of which will be sold on reasonable terms, and warranted true to label.

All who desire to purchase trees would do well to examine our stock before purchasing elsewhere.

Jackson, Mich., Oct. 1857.

HARWOOD & DUNNING.

FARM FOR SALE.

A valuable improved farm is offered for sale located in the town of Waterloo, Jackson county, consisting of 180 acres of choice land of which 50 is covered with a good quality of timber and 20 is marsh meadow; 116 acres is arable and 75 of these are seeded down to clover. The whole is well inclosed with fences, and has a good frame house, framed barn, and other fixtures with three wells of good water. There is also an orchard of 200 trees of six to fifteen years standing; and several varieties of cherries, peaches and plums, and twelve varieties of cherries all in bearing. There are also some quince trees and four varieties of grapes.

With the farm will also be sold some choice stock full bloods and grades, should the purchaser desire to purchase, two teams of horses and some fine woolled sheep, and Suffolk and Essex p'gs. For farther particulars apply by letter or otherwise to

CYRIL ADAMS,

Portage Lake, or to

R. F. JOHNSTONE,

Editor Mich. Farmer, Detroit.

Lake Superior Journal.

THE Subscriber, having been compelled by ill health to transfer to other hands the *Magazine of Travel*, with all its flattering prospects, with a view to a change of climate, has taken in hand the Lake Superior Journal published at Marquette, Lake Superior, which latter is to be devoted to the development of the resources of that new and interesting field, the Upper Peninsula. To this end, he will traverse and explore in all its length and breadth, and as far as possible, its depths too. To this end, also, he has engaged able and reliable correspondents in all the mining districts—men who will give no countenance to swindling operations, but who will enrich its pages with trustworthy mining intelligence, and with other local matters of general interest, as well, such as descriptions of the country, its varied character, capabilities, &c.

The *Journal* enters upon its ninth volume on the first of May 1858, enlarged, in quarto form, (eight pages) and in an entire new dress, new and fine type having been procured.

Terms in advance.—To single subscribers two dollars a year—after six months \$2.50, at the end of the, \$3.00.

To clubs, at the rate of five copies for eight dollars, strictly in advance, or, if some little indulgence be given, it must be on the responsibility of the agent.

WARREN ISHAM.

PLOWS! PLOWS!!

STARBUCK'S, Eagle & Ruggle's, Nourse & Mason's Plows, of every description, now on hand for Spring sales, May 2d At PENFIELD'S, 103 Woodward Ave. Detroit.

Milford Woolen Factory.

THE Subscribers would inform the public that their Factory is now in operation and that they are prepared as usual to exchange cloth for wool. They will also pay the market rates in cash for good clean fleece wool delivered at their Factory in Milford. They would say to those who may wish to exchange, that they can realize for their wool from twenty-five to thirty per cent more than they can get in the market cloths worth from one dollar to one dollar twenty-five cents per yard in cash can be obtained for two and a fourth, two and a half and two and three fourths pounds of wool. Flannels of all kinds, Tweeds and Cassimeres can be had from twenty to thirty per cent less for wool than for cash. Merchants will be furnished with cloths on such terms as cannot fail to give satisfaction.

Custom Carding and Cloth Dressing will be done in the best possible manner for ready pay only.

DAVIS & HIBBARD.

Milford Mich., May, 1858. June 2d

ATTENTION FARMERS!!

ALL those who want a good article of Cloth or Flannel manufactured for their own use, will do well to take their

WOOL

—TO—

CORNWELL'S FACTORY,

Ann Arbor, Mich.

We have been adding New Machinery to our establishment, and with our long experience in the business, we feel confident that we can give entire satisfaction.

OUR PRICES ARE:

One half the cloth we can make from the wool; or

We manufacture wool as follows:

For Cassimeres, 3s. per yard.

White Flannel, 2 yards wide, 3s. "

Do do 1 yard wide, 1s. 6. "

Madder red Flannel, flat colors, 30d. "

Wine and Pressed Flannel, 2s. "

Wool sent by railroad will be promptly attended to. All work warranted well done, and ready when promised, or all damages paid prompt.

A large Stock of Cloths, Flannel and Stocking

Yarn on hand,

To exchange for wool on reasonable terms.

CORNWELL & BROTHER.

Ann Arbor, May, 1858.

June 6t

Rarey's Art of Taming Vicious Horses.

WARRANTED GENUINE.

JUST published, illustrated instructions in Rarey's art of taming wild horses, guaranteed to give satisfaction. This is not the method described in horse taming books or taught by itinerant jockies as Mr. Rarey did not disclose the most important feature of his secret in this country. The price of my instructions has been reduced to \$3. All persons remitting the money must promise over their signature not to divulge the process within three months from date of reception. This method is warranted to effectually subjugate the most ungovernable horse that can be produced.

Address

CALEB H. RAREY.

Albany

EMERY'S JOURNAL OF AGRICULTURE.

THE SECOND volume of this new and popular WESTERN JOURNAL will commence July 1st., 1858. It is the aim of the publishers of this Journal to make it a fair, full and reliable exponent of Western Farm Interests—a channel for the dissemination of such information as is best adapted to the wants of the North-Western farmer, embracing the experiences and experiments of our oldest and newest farmers. The Eastern man, who intends coming West will find it valuable; those who have Western interests and Western friends will find it just what they want.

The year will be divided into two volumes of six months each, with a full index at the end of each.

TERMS—\$2 per year or \$1 per volume, in advance. Clubs at reduced rates.

Send for a single volume at once, and see for yourselves.

Sample numbers sent gratis application.

EMERY & CO.

July 2d

204 Lake street, Chicago, Ill.

PITTS' HORSE POWERS AND SEPARATORS

MADE and Warranted by John A. Pitts, at his manufactory in Buffalo, N. Y., are furnished to order at manufacturers prices adding transportation by GEO. N. BOLLES, Agent for the state of Michigan, at Kalamazoo. Orders by mail will receive prompt attention. June 3d